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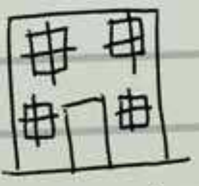

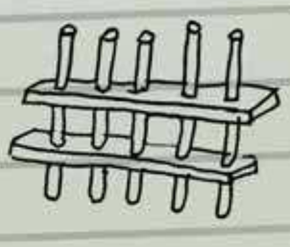
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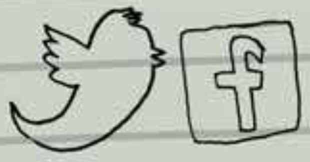

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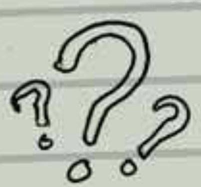

EVERYTHING YOU NEED TO KNOW ABOUT SETTING UP YOUR OWN STUDIO

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GDC 2014 AT-A-GLANCE

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DIVERSE EXPO FLOOR

(Wednesday – Friday)
Connect directly with company reps and check out the latest gaming middleware, hardware, software and product demos

BUSINESS & CAREER DEVELOPMENT

(Wednesday – Friday)
Make connections, gain insight, and get advice at the GDC Business Center, Career Pavilion and the Game Career Seminar

PARTIES, EVENTS & SPECIAL EXHIBITS

(Monday – Friday)

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Playable games from top emerging studios and developers at GDC Play & IGF Pavilion

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ISSUE 144 NOVEMBER 2013

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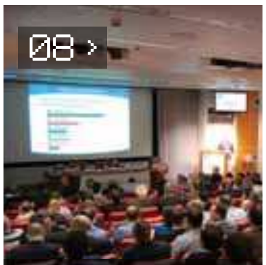
HOW TO START YOUR OWN STUDIO

Experts in law, business, PR and more share their advice for new developers



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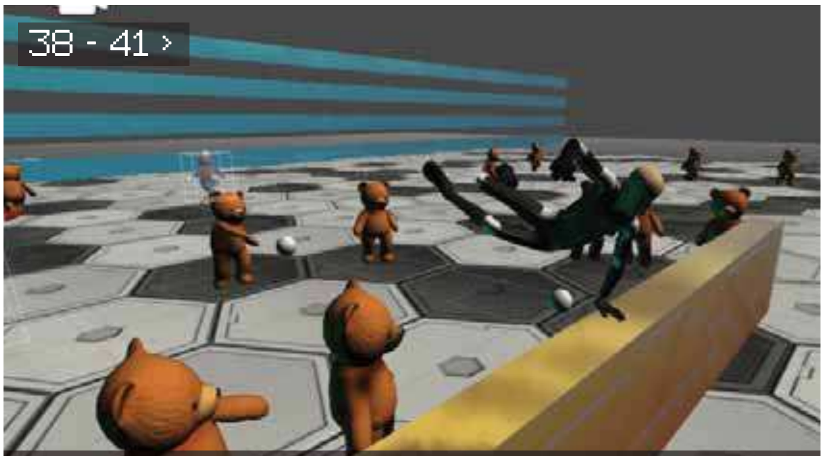
HEARD ABOUT

Scoring Remember Me



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EDITORIAL

IN WITH THE NEW

THE START OF a new console generation always feels like a fresh start for video games development, but this month's double launch of Xbox One and PS4 feels like something more.

After all, these are unlike any devices we've had before, built to be a high-end gaming PC, a set-top box, Blu-ray player, entertainment downloads store, social network and video conference calling system all in one. They are designed to connect with the smartphones and tablets that so many claimed would be their undoing, rather than compete with them. Such a structure changes how games can be designed; those oft-lamented companion apps could be the precursor to a whole new type of gaming experience.

For developers, the arrival of the next generation is also the first glimpse of where console gaming is heading for the next five, potentially ten, years. Yes, many studios have already had dev kits on their desks for months now, but for the rest of us, seeing those games in action is the first real taste of what PS4 and Xbox One can offer.

The devices also mark the beginning of a new hierarchy that has been building over the last few years. This will be the first home console generation where the infrastructure allows for genuine self-publishing from its early stages, and Sony and Microsoft are more attentive to studios than ever before. The relationship between developers and platform holders has rarely been closer, but only time will tell how strong that bond becomes.

It's a very interesting climate for established studios, let alone the plethora of start-ups that continue to flock to gaming.

And speaking of new things, hello. As you can tell from the scribble below, I'm James and I'm very happy to be joining the *Develop* team this month as the new Editor.

I've long been fascinated with how the video games of today are crafted, and am eager to learn even more – particularly as the nature of development continues to evolve.

I look forward to working with you all.

James Batchelor
james.batchelor@intentmedia.co.uk

James

New Britannia:

Why start-ups love London

The UK and its capital (pictured above) have become a hotbed for start-ups across Europe to set up shop

The development landscape is changing, with more newcomers than ever vying for attention. Microsoft's Anand Krishnan tells Develop why the UK is the ideal base for this new talent

by James Batchelor

THE RATE OF new companies opening doors is increasing, and many of them are finding a home in the UK.

Last month, Microsoft carried out an independent survey into the demographic of app developers working in the country, and found that a significant portion were new to development, or were still finding their feet in the industry.

Speaking to *Develop*, Microsoft's general manager for Developer and Platform Group Anand Krishnan explained why he believes the UK's capital is perfect for start-ups.

"London has become the biggest hub for start-up activity for a variety of reasons," he said. "There's a critical mass of resources that start-ups need in order to survive, such as financing, mentorship, legal advice, accounting advice and so on. And they all need to be set up in a manner that is accessible to a company that is just three people and an idea. That's what we see in London."

Krishnan's comments echo those of TIGA's Richard Wilson, who told *Develop* this month that research by the trade body shows that more than 50 per cent of the UK's games businesses first opened doors within the last four years.

Similarly, developer networks Game Kettle and Game Republic – which represent North East England and Yorkshire respectively – have commented on the number of new studios that are setting up in their regions.

"I've never seen so many start-ups in this area as I have in the past few years," said Game Republic director Jamie Sefton.

MIGRATING TALENT

Krishnan added that a significant portion of UK start-ups didn't originate here, instead moving over from the continent to take advantage of London's plentiful resources.

> ***"On estimate, we believe there are 30,000 to 40,000 London-based start-ups. Significantly more than you'd expect."***
>
> Anand Krishnan, Microsoft

"I meet a lot of entrepreneurs that started out in smaller centres in Europe and decided that they had to go somewhere bigger, and that place becomes London," he said.

"They come over to London, they open up their new business, and they too become part of that innovation ecosystem that we're engaged with.

"On estimate, we believe there are 30,000 to 40,000 London-based start-ups, and that is significantly more than what you'd expect."

And while Microsoft's study focused on the broader world of apps, encompassing video games, Krishnan highlighted our industry as one of the strongest sectors that Microsoft works with. In fact, ex-games devs are behind some of the most promising app start-ups.

"London is really strong when it comes to the gaming ecosystem," he said.

"A disproportionate segment of new app developers probably come from gaming. That's partly because the opportunity has drastically changed with the power of self-publishing and app stores. It's also because gaming is one of the sectors that is closest to having figured out how to monetise and do so in a profitable manner.

"A good indicator would be that one of the focus areas of our accelerator programme is gaming. In our pilot programme, two studios out of five are games developers – that's 40 per cent of our current batch."

The Microsoft exec is also keen to encourage other tech giants, publishers and accelerators to assist as many start-ups as they can: "Collectively, we're at a time where the big players need to do more things to help the whole ecosystem and fewer things related to one-on-one adoption. That's good for all of us."

Develop has put together its own offering for start-ups in the form of our Start Your Own Studio Special – eight pages of expert advice in law, business, PR and more that begins on p14. For more development tips on starting up, head on over to our website at: **www.develop-online.net/startupspecial.** ■

DEVELOP 100: TOP EUROPEAN START-UPS

develop
100

We're charting Europe's most promising firms

THE UK IS not the only home for hot new talent. There is a myriad of new firms working on their first projects across the continent and we'll be celebrating the best in the next *Develop 100*.

We'll be showcasing games businesses of all kinds – from games development studios to related technology firms and other services businesses – all of which first formed in the last 24 months.

The full list, plus commentary from our team of experts, will be published in the next edition of the *Develop 100*, available from Tuesday, November 19th as a free digital publication.

The *Develop 100* is brought to you in association with UKIE.

PlayStation UK developer roadshow planned for 2014

Sony celebrates success of new developer event, plans to visit studios around the UK

by James Batchelor

Sony's PlayStation Open Days guided developers through the process of creating a game for the company's game platforms, and has been a resounding success

LAST MONTH, SONY invited small studios and indies from across the UK to its London HQ for the inaugural PlayStation Open Days.

The two-day events served as an introduction to both the company's platforms and its licensed developer programme, with Sony's publisher and developer relations team talking studios through the process of signing up to develop for PlayStation.

The feedback from attendees has been "overwhelmingly positive", according to senior account manager for development Agostino Simonetta. And Sony has taken on board calls for similar events outside London.

"We had a fantastic response from all the studios that came along," he told *Develop*. "We've been asked to do another event in our office again, but some developers involved with local organisations have also asked us to do a roadshow. We've been asked to go to Scotland, the South West, the Midlands and more so we can host Open Days all around the country.

"We actually have something coming up on November 7th with Game Republic, where we're going to talk about PlayStation 4, PS Vita and the business, which will be a similar presentation to the one we held here.

"We would like to do regional events like this quite regularly but obviously we're getting close to launch. We'll be very busy over Christmas, so we're probably looking at the New Year."

Simonetta went on to say that Sony is considering running these events on a quarterly basis in London, with supplementary regional events if there is enough demand.

"More often than that and we might run out of new things to talk about, but if people want it to be more regular, we can look at that," he added. "It's about having the right time between events, and not doing too many."

SUPPORTING START-UPS

For its first PlayStation Open Days, Sony focused on introducing new studios to how its platforms, tools and developer relations team works. Going forward, it's keen to explore other topics that will help studios grow their business – even if that means developing for rival platforms.

"We don't want to just say how great it is to develop for PlayStation, or how beautiful the platforms are," Simonetta explained. "The whole idea is not just to incentivise people to jump on PlayStation platforms but also to help them, giving them an insight on how to best approach their marketing and PR strategy. That's something they can apply to PlayStation titles, but it can also help them in general."

During the Open Days, Sony reminded studios that registering as a PlayStation licensed developer is actually free of charge. Not only has the platform holder seen a positive impact in terms of attendees signing up, it also believes word of mouth from those studios has led to other companies registering as well. The whole thing has boosted Sony's confidence about how it approaches games developers.

"This was a confirmation that the open approach we're taking is actually the right direction," said Simonetta. "We know that PlayStation being an open platform force of publishing is the right approach.

"When we started to organise the Open Days, we thought they were a good idea, and the feedback we've had from people has been so overwhelmingly positive that it has validated the experiment. It helps us push forward with continuing this exercise."

develop iPad

Videos are available within the iPad Edition of **Develop** on iTunes and the Browser-based Digital Edition, which can be accessed at **develop-online.ne**

THIS MONTH: The Foundry's 3D modelling software Modo **Unreal Engine-powered Revolution 60** Introduction to Marmalade 7

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DEVELOP DIARY

Your complete games development event calendar for the months ahead

GAME CONNECTION EUROPE 2013
December 3rd to 5th
Paris, France
www.game-connection.com

The business-focused games summit touches down in Paris once again to kick-start more deals and projects.

Encompassing marketing and business disciplines, the event features a number of sessions presented by leading industry figures.

Hear from the likes of Naughty Dog, Ubisoft Blue Byte, 6waves, SOE and more as they offer business tips and discuss creative methods.

For the full schedule, visit the Game Connection Europe website.

NOVEMBER 2013

GDC NEXT 2013 & ADC 2013
November 5th to 7th
Los Angeles, USA
www.gdcnext.com

BLIZZCON 2013
November 8th to 9th
Anaheim, USA
www.blizzcon.com

LONDON GAMES CONFERENCE 2013
November 13th
London, UK
www.londongamesconference.com

ME AWARDS 2013
November 14th
London, UK
www.mobile-ent.biz

PLATFORM 2013
November 15th
Hull, UK
www.platformexpos.com

MOBILE GAMING EUROPE 2013
November 20th
London, UK
bit.ly/Q7yzfH

SOCIAL GAMBLING & GAMING 2013
November 21st
London, UK
bit.ly/19z4MZA

LAUNCH CONFERENCE 2013
November 21st to 22nd
Birmingham, UK
www.launchconference.co.uk

XBOX 360 MCV QUIZ – XMAS 2013
November 26th
London, UK
www.mcvuk.com/events

DECEMBER 2013

GAME DISTRIBUTION JAPAN 2013
December 3rd to 4th
Tokyo, Japan
bit.ly/1bvzyG8

GAME CONNECTION EUROPE 2013
December 3rd to 5th
Paris, France
www.game-connection.com

GAME QA & LOCALISATION 2013
December 10th to 11th
San Francisco, USA
sanfran.qalocforum.com

JANUARY 2014

STEAM DEV DAYS 2014
January 15th to 16th
Seattle, USA
www.steamdevdays.com

MOBILE GAMES FORUM 2014
January 22nd
London, UK
www.mobilegamesforum.co.uk

DEVELOP QUIZ
January 29th
London, UK
www.develop-online.net/events

THE MONTH AHEAD

A look at what November has in store for the industry and beyond

NOVEMBER 5TH
GDC Next 2013
This new event at the LACC focuses on creating the games experiences of the future.

NOVEMBER 8TH
Gravity
After a long gestation period, join Sandra Bullock in space as she struggles to get home.

NOVEMBER 8TH
Professor Layton and the Azran Legacy The good professor and his trusty sidekick star in their first 3DS escapade.

NOVEMBER 13TH
World Kindness Day
Make an effort to help someone out, like taking a stand against those cyber bullies.

NOVEMBER 13TH
London Games Conference
This year's key industry event focuses on the next generation, and how to capitalise on it.

MobileGamingEUROPE

NOVEMBER 20TH
Mobile Gaming Europe 2013
Find out how to boost discoverability and brand loyalty in your mobile games.

NOVEMBER 21ST
World Hello Day
You say goodbye, and we say hello. Can you greet more than ten people today?

NOVEMBER 21ST
Launch Conference 2013
The Birmingham show is back to teach you about launching a product or business.

NOVEMBER 22ND
Tearaway
Unfold this Vita adventure, and take a walk in Media Molecule's papercraft wonderland.

NOVEMBER 22ND
Xbox One UK and US launch
Following a rough road to retail, Microsoft's entertainment powerhouse drops worldwide.

NOVEMBER 22ND
Assassin's Creed IV: Black Flag
While Ubisoft hunts for the glitch in *Watch Dogs'* system, *AC IV* sets sail on next-gen.

NOVEMBER 29TH
PS4 European launch
Sony's next-gen machine lifts off on this side of the Atlantic after a momentous hype tour.

To find out more about Deep Silver's publishing, marketing and promotional services, go to **www.deepsilver.com**

Registration 15.15pm | **Conference** 16.00pm - 20.35pm | **Networking and buffet** 20.50pm - 23.00pm

lgc london games conference 2013

Wednesday November 13th 2013 • 15:15 - 23:00
One Wimpole Street, 1 Wimpole Street, London, W1G 0AE
www.londongamesconference.com

THE SECRETS OF NEXT-GEN SUCCESS

Leaders and luminaries offer insight on how to build a hit game

16:00 Welcome and opening remarks
James Binns, Conference Chairman

16:05 KEYNOTE ADDRESS: Next-gen games retail
Martyn Gibbs, CEO, Game Retail Ltd

16:25 What gamers are talking about
Bruce Daisley, UK director, Twitter UK

16:40 Sharing great stories on Kickstarter
Charles Cecil, Founder, Revolution

16:55 Videogames, by the numbers
Michael Pachter, Research Analyst, Wedbush Securities

17:10 The whole world is watching... the explosion of video game video
Jonathan Simpson-Bint, CRO, Twitch

17:25 Driving growth and engagement of your game with Facebook
Tarquin Henderson, Head of EMEA Gaming, Facebook

17:40 The changing face of motion capture
Phil Elderfield, Product Manager, Vicon Motion Systems

18:20 The Indie Revolution
Shahid Ahmad, Strategic Content, SCEE

18:35 Ratings war
Simon Little, Managing Director, PEGI

18:50 Making the cut
Roberta Lucca, CMO and co-founder, Bossa

19:05 Building a community and keeping track
Miles Jacobson, Studio Director, Sports Interactive

19:20 The long con(version)
N'Gai Croal, founder and CEO, Hit Detection

19:35 The challenges of quality assurance for a changing product
Erik Hittenhausen, QA - Games

19:50 Google and games
Ross Brockman, Strategic Partner Lead Mobile & Games, Google

20:05 Building a successful developer ecosystem
Gemma Paris, Developer Community Manager, ARM

20:20 Creating the perpetual franchise
David Reid, CMO, CCP Games

20:35 Closing Remarks
Jo Twist, Chief Executive Officer, UKIE

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Prepare for next-gen at the London Games Conference

PlayStation, Sports Interactive, Google, Twitter, Twitch and more to offer insights on developing and selling games

THERE IS JUST one week to go until the London Games Conference kicks off on November 13th.

18 different experts will take to the stage, offering insight on game development and marketing to an audience of 300 top games industry execs. Topics will range from building a successful developer ecosystem to driving engagement of your game on social media.

Tickets are priced at £269 – to order, contact Jennie.Lane@intentmedia.co.uk or call 01992 535 646.

Alternatively, you can head over to **londongamesconference.com** for tickets and more information.

The schedule for the four-hour event is now set, and you can view the list below. ■

LGC: THE FULL SCHEDULE

15:15 – 16:00 - REGISTRATION with tea and coffee

16:00 - WELCOME AND OPENING REMARKS
James Binns, Conference Chairman

16:05 - KEYNOTE ADDRESS: NEXT-GEN GAMES RETAIL
Martyn Gibbs, CEO, Game Retail Ltd

16:25 - WHAT GAMERS ARE TALKING ABOUT
Bruce Daisley, UK Director, Twitter UK

16:40 - SHARING GREAT STORIES ON KICKSTARTER
Charles Cecil, Founder, Revolution

16:55 - VIDEOGAMES, BY THE NUMBERS
Michael Pachter, Research Analyst, Wedbush Securities

17:10 - THE WHOLE WORLD IS WATCHING… THE EXPLOSION OF VIDEO GAME VIDEO
Jonathan Simpson-Bint, CRO, Twitch

17:25 - DRIVING GROWTH AND ENGAGEMENT OF YOUR GAME WITH FACEBOOK
Tarquin Henderson, Head of EMEA Gaming, Facebook

17:40 - THE CHANGING FACE OF MOTION CAPTURE
Phil Elderfield, Product Manager, Vicon Motion Systems

17:55 – 18:20 COFFEE BREAK

18:20 - THE INDIE REVOLUTION
Shahid Ahmad, Strategic Content, SCEE

18:35 - RATINGS WAR
Simon Little, MD, PEGI

18:50 - MAKING THE CUT
Roberta Lucca, CMO and Co-Founder, Bossa Studios

19:05 - BUILDING A COMMUNITY AND KEEPING TRACK
Miles Jacobson, Studio Director, Sports Interactive

19:20 - THE LONG CON(VERSION)
N'Gai Croal, Founder and CEO, Hit Detection

19:35 - THE CHALLENGES OF QUALITY ASSURANCE FOR A CONSTANTLY CHANGING PRODUCT
Erik Hittenhausen, Head of Functionality and Compliance, QA - Games

19:50 - GOOGLE AND GAMES
Ross Brockman, Strategic Partner Lead Mobile & Games, Google

20:05 - BUILDING A SUCCESSFUL DEVELOPER ECOSYSTEM
Gemma Paris, Developer Community Manager, ARM

20:20 – CREATING THE PERPETUAL FRANCHISE
David Reid, CMO at CCP Games

20:35 – CLOSING REMARKS
Jo Twist, Chief Executive Officer, UKIE

20:50 – NETWORKING BUFFET AND DRINKS
Atrium/Events dining room

23:00 – EVENTS FINISHES

Start your career at Launch Future Gaming 2013

Indies set to descend on Birmingham for key advice on how to get into games

THE LAUNCH FUTURE Gaming & Digital Conference returns on November 21st and 22nd at the Innovation Birmingham Campus.

More than 300 gaming professionals and aspiring grads are expected to take part in conference streams, and there will also be opportunities for networking.

The first day of the indie-targeted event will focus on launching a business and product. The last day will provide an emphasis on getting a career in games. Speakers include Microsoft, Crytek, Marmalade and Flaming Pumpkin.

"Launch aims to bring indies and industry experts together, and create a community of mutual understanding, where knowledge is shared, creativity flourishes and the future of the industry is explored and addressed," said head of Launch Pia Pearson (*right*).

More information on the two-day event is available at **www.launchconference.co.uk**. ■

Connect with publishers

Thousands of developers and publishers from across Europe get ready for business in Paris at Game Connection Europe

GAME CONNECTION is back in Paris between December 3rd and 5th.

The business networking event offers a stage for developers to sell their ideas and pitch games at any stage of development, while the Selected Projects program also gives the opportunity for 15 indies to show off their titles in front of major publishers.

This year's Game Connection Europe will include more than 75 conferences and panels, featuring master classes from C-levels managers at companies such as Sony Online Entertainment, Ubisoft and Naughty Dog.

"As the industry changes, we are growing with it, building a show that is no longer exclusive to developers and publishers, but open to service providers, distributors, business and marketing services," said Game Connection's Giulia Palmieri.

"This is an event where all platforms are represented and big corporations walk side to side to start-ups. We are not obsessed with numbers: what matters most for us is the value of our attendees, and their pertinence to the business side of the industry."

More details are available at **www.game-connection.com**.■

Games

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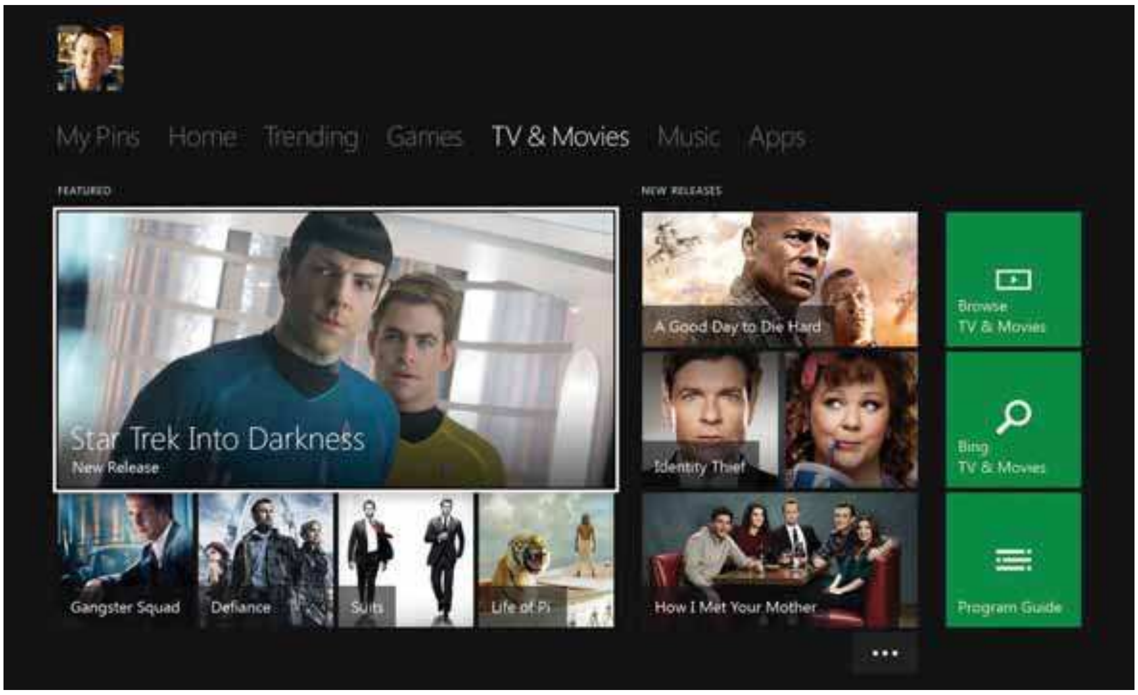
//COMMENT: BUSINESS

One box to rule them

Rick Gibson analyses Microsoft's plans for reaching the mass audience with Xbox One



Despite the initial backlash, consumers are still happily backing Microsoft's entertainment plans for the Xbox One, says Rick Gibson

WHEN THE FIRST Xbox One ad was released without mentioning games at all, it surprised many by targeting not gamers, but sports fans. This reinforced widespread criticism of the non-games focus at the hardware's unveiling. Among the reasonable and less reasonable censure of Microsoft's strategy, why did the console's multimedia functionality gall so much, and what strategic impact will it have?

Ironically, when the first Xbox launched, Microsoft vehemently denied it was a Home Hub designed to usurp other media devices. Until then, consoles had largely been purely gaming devices and Microsoft was sensitive to being seen as a domineering outsider using a games console as a Trojan Horse.

A SUBSTANTIAL INVESTMENT

The media features of the Xbox 360 were relatively muted at launch, but non-games services, most designed to augment Gold subscriptions and drive new revenue, were steadily released. Microsoft invested substantially in partnerships with broadcasters and production companies like Sky, HBO and ESPN, pilots of novel interactive television shows and advertising using Kinect, brand-sponsored apps like *Nike+ Fitness*.

Microsoft's growing investment has been driven by substantive changes in user behaviour. Microsoft revealed in early 2013 that 'entertainment' usage of the 360 had been growing at 57 per cent per annum, and actually overtook game usage in March 2012 – impressive considering that most non-games entertainment is locked behind Gold membership, a service originally designed to monetise the hardest-core 360 gamer. This is not confined to Microsoft; Netflix's biggest distribution platform is the PS3 on which the majority of usage is also non-games.

With Xbox One's unveiling, Microsoft's management, emboldened by long-term trends in how their hardware is actually used, highlighted its entertainment capabilities. Launch details revealed a host of non-games features: stacked operating systems for video uploading and Skype chat, live TV channels and even the commandeering of other media devices like set-top boxes.

Video is key to console manufacturers' social strategies, but Microsoft is taking this to a whole new level. LA-based Entertainment Studios, run by a former CBS exec, is a 200-man studio developing new formats. Following Netflix's lead, Microsoft is commissioning original drama for broadcast on its new Xbox One TV channel, and is hiring TV people to develop interactive TV exclusives.

> ***“It seems inevitable that Xbox One owners will lap up this new content with increasing enthusiasm, because it's now expected.”***

THE ENTERTAINMENT BOX

This media strategy is multi-faceted, aggressive, massively funded and archetypically Microsoft. Its logic is simple. Xbox One will soon reside under millions of televisions in Western households. Microsoft knows its users far better than cable companies thanks to its community features, marketplaces and vastly better usability. That valuable data, real estate and distribution channel releases the potential to bypass TV manufacturing and cable firms' tired and underwhelming interactive services. To place this successfully behind a paywall requires a compelling content line-up for which it is paying handsomely.

Will the strategy work? On the business side, Microsoft will find some more and less willing partners. VOD providers are quickly transitioning to the new platform, and TV production and IP-owning companies will welcome a generous new partner.

Advertisers will initially be more wary, given in-game advertising's mixed track record. Although agencies are still surprisingly slow to buy higher cost inventory from owners of highly profiled games audiences, they should eventually follow big brands onto the platform. Cable and satellite TV firms may react more suspiciously to the HDMI pass-through functionality, which could relegate their set-top box operations to just another app in Microsoft's universe. But on the consumer side, audience data is unequivocal. It seems inevitable that Xbox One owners will lap up this new content up with increasing enthusiasm, because it's now expected.

So the hue and cry over non-games functionality on Xbox One originated in misreading profound changes in user behaviour. Microsoft may possibly have mistimed this strategy's announcement but its 'entertainment' plans look extensive, robust and comfortable alongside its strong games plans.

Given that pre-orders for Xbox One are beating historic numbers for 360, it seems that, once again, the consumer is happily ignoring this storm in a teacup. This strategy may provide solid differentiation for Xbox One and Gold membership for years to come.

Rick Gibson is a director at Games Investor Consulting, which provides commercial check-ups, strategy and data to games, media and finance companies.
www.gamesinvestor.com

//COMMENT: DIGITAL

Digital space: The final frontier

CEO **Debbie Bestwick** explains how digital distribution turned Team17 into a publisher again

OVER A DECADE ago, Team17 digitally distributed its first PC game. The same year also saw the launch of its first mobile game and the live beta launch of its first online-only game – in South Korea of all places.

At the time, this generated probably less than one per cent of the business' yearly revenue. Fast forward to the current day and over 90 per cent of Team17's games revenue for 2013 will be generated by digital distribution via mobile, PC and consoles.

Developers, like Team17, that took that early leap-of-faith into the digital space have radically changed the way they make games and run their business. Team17 has grown from being an indie developer, transforming its business into that of a digital publisher. Sales, marketing, legal, finance, operations, QA, localisation and community support are just a few additions that have been made in the last five years.

The whole process has left Team17 ahead of the curve, allowing the business to open up its expertise in digital publishing and to work with fellow indie studios that are new to the space.

THE DIGITAL SHIFT

Here's just a few of the high-level changes digital distribution brings:

- Who needs focus groups when we can now make our games with the community involved? In fact, we can involve them before the game is even being made.
- Funding has never been so easy. It's now possible to release an early version and monetise from the start of the project.
- PR finally means what it should: 'public relations', not just 'press relations'.
- Who cares about day one sales? Now it's about lifecycle management and, yes, I can see worst case for my daily sales by region.
- Gold Master: what's that? All I hear is Minimum Viable Product – I hate this term, by the way. Games are a service, no matter what platforms you release on.
- Price write-downs and sale-or-return. Anyone who's published into retail knows these are the dreaded phrases when uttered by retail buyers. Now we promote our games by country or globally for the day, weekend, week and so on, at the flick of a switch. I know only about half of the platforms can do this, but the others will catch up.
- We know we're going to get paid and in almost all cases it's monthly. This is a biggy – I think every dev has a few horror stories. No waiting until 45 days after the quarter's end, 60 days after the end of the month or when your third-party can actually pay you.
- Increase your fanbase. On *Worms* alone, we've seen the core age range drop in the last few years due to the game being introduced to a new audience. Digital distribution simply offers more promotion opportunities than traditional retail.

A NEW ERA OF DISTRIBUTION

A few years ago the industry talked about the sales levels of triple-A, A, B and C grade games. Today, I believe there's triple-A (retail and digital distribution) and "everything else" (digital distribution only). If you're in the "everything else" camp and not digitally distributing your games, you're more than likely struggling as a business, never mind making a profit. I can't begin to tell you just how important it is for the survival of many development and publishing firms that they get into and understand the digital space.

Digital distribution has ensured more games than ever are being made. Team17 would not have remade *Alien Breed* or *Superfog* without the existence of digital distribution, and I certainly wouldn't have greenlit the third-party games or new IPs we're working on.

Despite its roots in retail, Team17 now makes 90 per cent of its revenue from IP such as its classic Wormds series (above) through digital distribution

I recently asked Sony's Shahid Ahmad just how many of the game deals he's done in the last few years would he have done if there was only retail. His response was telling: just one.

Competition is fierce for visibility across all digital platforms and it's never guaranteed. Getting digital publishing right takes hard work and lots of time. It took the failure of a non-*Worms* game that cost a seven figure sum to make us realise we had to change how we approached everything, building our own publishing firm in the process.

The really good news is we now have many platform choices with lots of different business models. The spirit shared between the indie developers and publishers is something I'm incredibly proud to be part of.

Be it mobile, PC or console, we work to help each other and care about each other's success, often cross-promoting in some capacity – whether through social media or in-game.

Debbie Bestwick is one of the founding members of Team17. She pioneered Team17's leap into digital publishing, and was promoted to CEO in 2009. Find her on Twitter: **@djbteamsters**
www.team17.com

//EXTRA CONTENT ONLINE

"'I'm of the opinion that more games need to directly reference more classic works (of literary fiction, epic poem, song, portrait, film… and all the others) to learn the language of storytelling."

Andrew Smith, Spilt Milk Studios

"F2P games have built-in limitations or friction points that can only be overcome with currency. Designing friction and frustration for the sake of monetisation is what I consider at odds with high quality games."

Jani Kahrama, Secret Exit

"GallantCloud has been granted access to hardware and software that wouldn't have been possible going it alone. Great things were happening, but now they are happening with greater tools for the job."

Paul Rayment, GallantCloud

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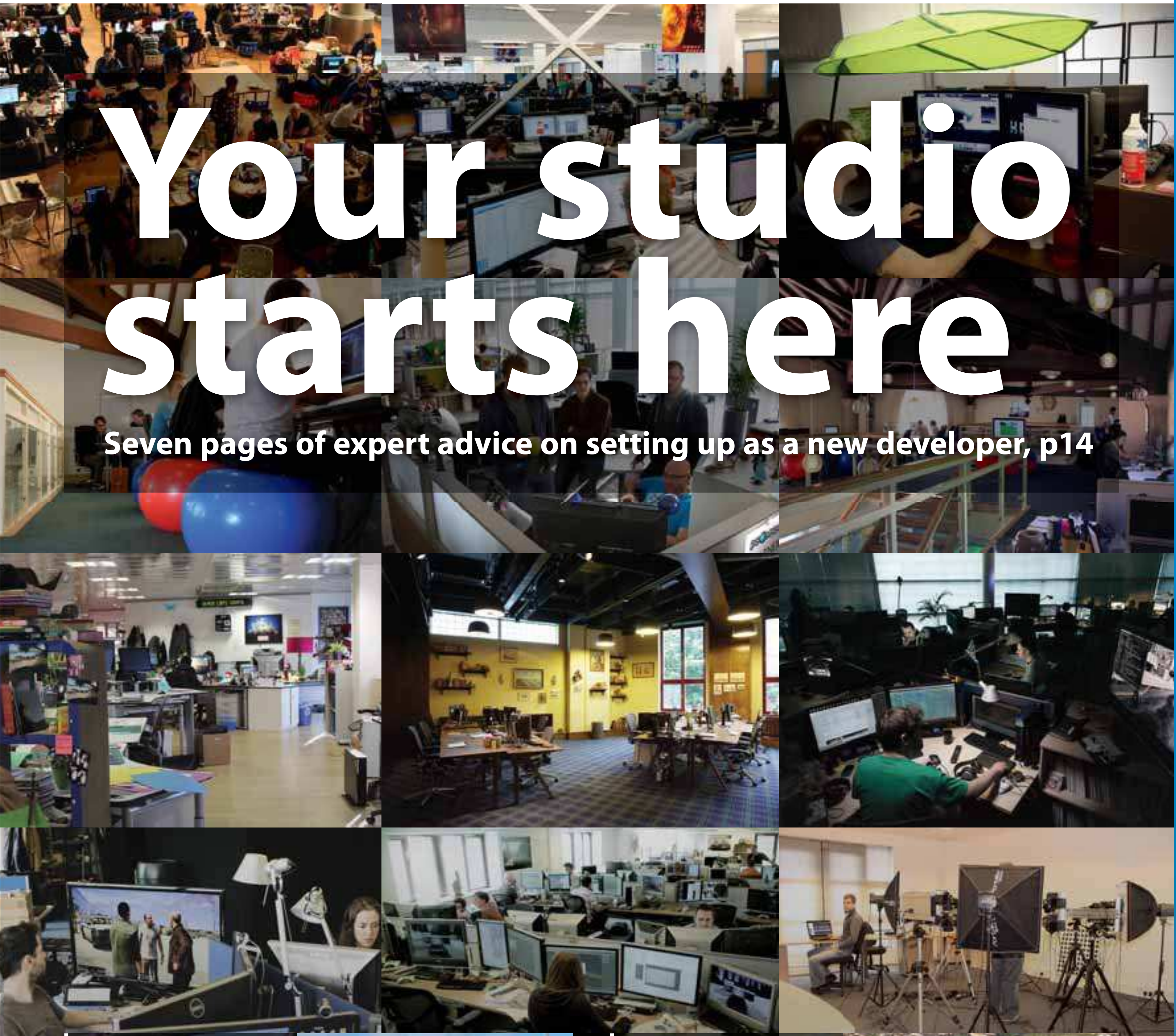

Your studio starts here

Seven pages of expert advice on setting up as a new developer, p14

Region focus:
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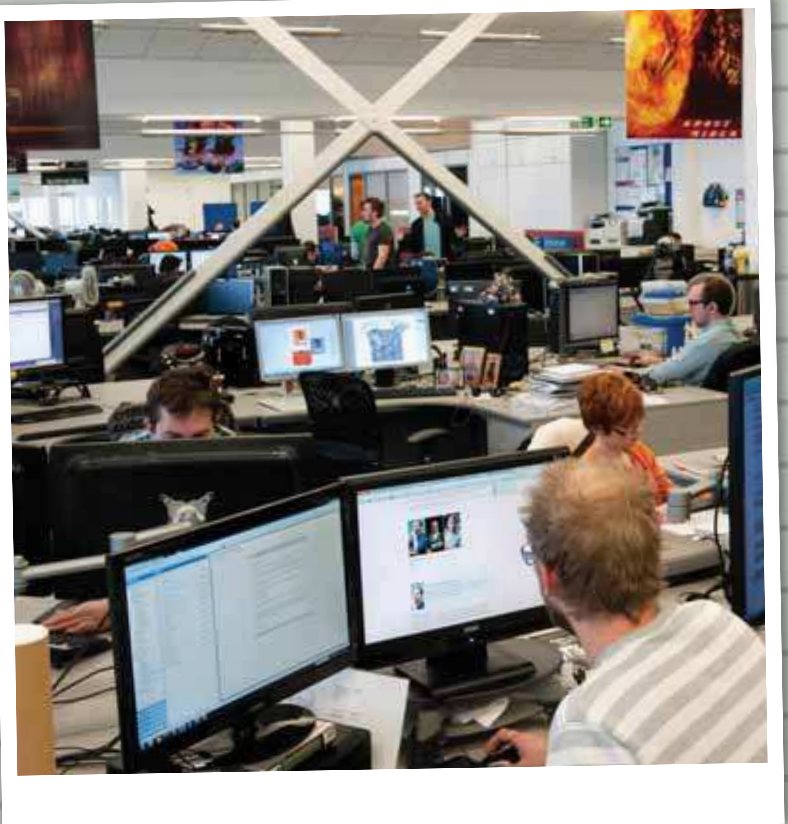
p28

Start your own studio



The barriers to entry may have lowered, but setting up shop as a new developer is no less complicated. So we have consulted veterans and experts to provide the ultimate guide on starting your very own studio

OVER THE LAST year, more than 100 new studios have opened doors in the UK, with even more start-ups emerging around the world.

And while it may sound like the development community is getting crowded, there's always room for bright new faces with shiny new ideas and the determination to bring their unique games to market.

But getting started is no easy task. While indies are able to code from the comfort of their homes, those with larger ambitions need to consider much more before they can get started.

Start-ups need to recruit a team, find an office, register themselves as a company, protect their IP and other assets, network with other developers and potential publishers or investors, begin work on actively promoting both themselves and their games, maybe join a trade body – the list goes on.

But fear not – *Develop* has compiled a complete guide to setting up your own studio. We've spoken with experts in business, law, PR, networking and more, as well as trade bodies and developers who have already survived the rigmarole of opening new studios.

In short, we have everything you need before you begin your own development journey. Who knows? Next year, we might be asking for your advice.

AND THERE'S MORE ONLINE

Keep your browser pointed to the *Develop* website all this month as we continue our start-up special online. We'll be publishing more tips from established developers, such as Toxic Games' account of setting up straight out of education and Game Lab Social's advice to developers looking to branch off from their current employer.

develop-online.net/startupspecial

☑ Who needs publishers? **p15**

In the age of indies, UK studios debate whether start-ups need the support of larger games firms in the same way their forebears have

☑ Lean, mean, developing machines **p16**

TIGA CEO Richard Wilson discusses how Eric Reis' book The Lean Startup applies to developers, and the benefits of joining a trade body

☑ How to build relationships **p18**

UKIE CEO Jo Twist ponders the best ways fledgling developers can establish a rapport with both their peers and potential investors

☑ The power of PR **p20**

Natalie Griffith, owner of indie agency Press Space, offers advice on how new studios can handle their own PR and video game promotion

☑ Navigating the legal minefield **p21**

Harbottle & Lewis associate Nic Murfett breaks down the legal hurdles new games developers can expect to face in their early days

☑ Have you forgotten anything? **p22**

Developers from the UK and beyond share their tips on how to start up a new studio, including those oft-forgotten obstacles like finding an office

Do you need a publisher?

With a multitude of formats and channels to help bring your title to market, **James Batchelor** explores whether start-ups should even consider seeking publisher support

GETTING YOUR FINISHED game into the hands of consumers is considerably easier than it was ten years ago.

Thanks to the advent of app stores and other download platforms, new and small studios no longer need the support of a traditional publisher – but should they seek it anyway?

"It's a case of needs and wants," says New Star Games' community manager Mark Baldwin. "I think new developers would all want to have the support of publishers and platform holders, especially when starting out, but I think we've seen that you don't need it to be successful."

However, there are some in the industry that disagree. Ripstone director Phil Gaskell says that while the games market's barriers to entry have lowered, "the value that a good publisher adds to development is still as meaningful as it ever was".

Thumbstar's Gareth Edmondson agrees: "You need a publisher, unless you are all of these: very talented at creating unique excellent product, well connected or active and effective at self-promotion, very lucky and have adequate funding to take the risk of failure, and have sufficient resource (both human and financial) to have complete focus on promoting.

"Getting noticed in the mobile market, for example, is famously tough and it's getting tougher. It's pretty clear that the traditional app stores are really doing most of their business on just a few games, although there are plenty of other opportunities."

Baldwin also recognises that there are numerous advantages to having a large publisher behind you.

"Without a publisher, you have to find a way to self-fund," he says. "You take the whole financial burden on your shoulders and when things don't go to plan, that can be a heavy burden to shoulder.

"Keeping your game in the public eye after launch is also a difficult thing to do without the backing of a publisher."

SEEKING SUPPORT

If you decide that you do need to sign up with a publisher, how do you go about approaching them? Or should you wait for them to come to you, drawn by the self-promotion of your winning game idea? Should you pitch with a finished product or with a prototype?

"It sounds pithy but just ask," says Gaskell. "Talk to as many people as you can, attend networking events and try to speak with other developers as well as friendly publishers

"There's never a right or wrong time to ask, there's just the right and wrong people. Some publishers will want to see and play the game, but some might be happy to take a risk just on the team's track record."

But Baldwin warns: "If you go in too early asking for backing from a publisher you risk losing your IP while trying to negotiate a deal. You need to have more than just great ideas or a brilliant tech demo. You need a close to finished or finished product that a publisher can buy into and help with advertising and distribution. Something with less risk on all sides."

FIRST PARTY FRIENDS

While publishers are still deemed important, it is becoming increasingly beneficial to get the platform holders on board when releasing your game – even if you're a new, independent or small studio.

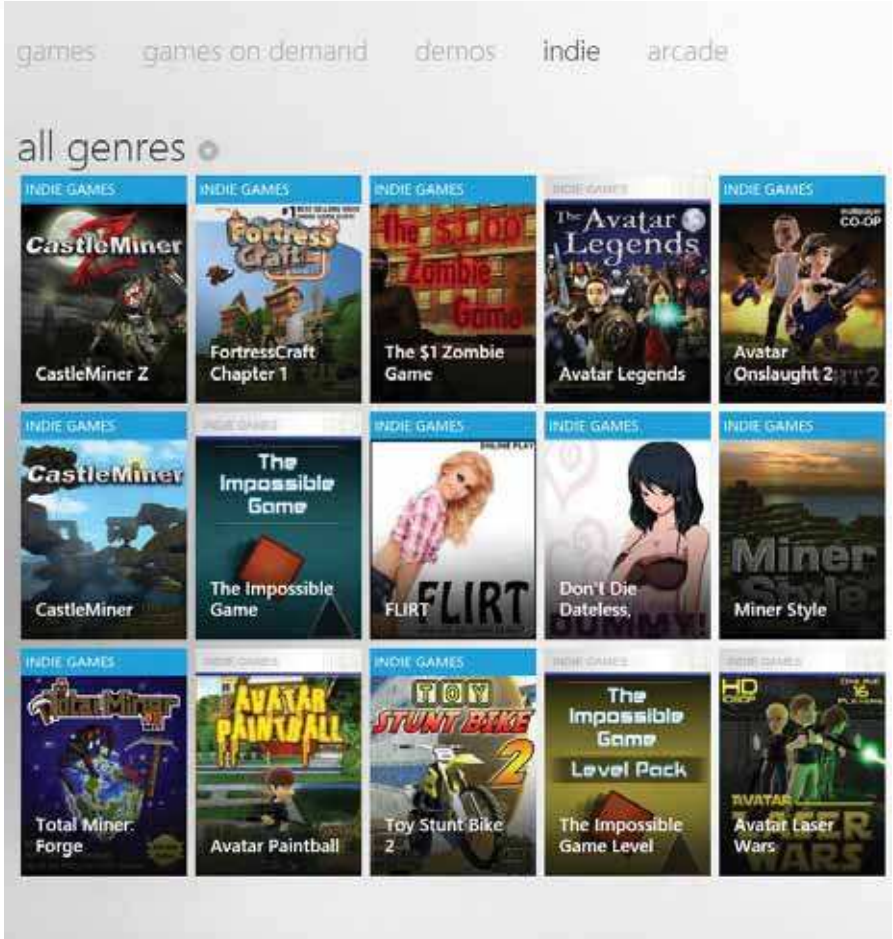
"If you can get the platform holder on side, you may not need a publisher at all," says Baldwin. "For an iPhone game, it's probably more important to deal directly with Apple. Getting your app featured on the App Store is potentially worth more than what you could get out of a publishing deal.

"The role of platform holders is almost merging into that of a publisher – they hold the keys to a small developer's success. Sony in particular seems to be forging ahead in this way with their approach to indie developers."

The growing influence of platform holders is just one example of how the routes to market are changing. And the role of publishers must inevitably change with it, or else they face being left behind by the new wave of small and indie developers.

"We see games publishing as a service to developers, rather than the perhaps old fashioned view of it being the other way round," says Edmondson. "The market needs quality, innovative and unique products, and I fully expect that to continue to come from new start-ups and indies.

"The power shifted back to content creators in the market a few years ago and I expect that to continue, so publishers will need to provide services to developers beyond the traditional marketing and PR functions to remain relevant."



Top-to-bottom: Ripstone's Phil Gaskell, Thumbstar's Gareth Edmondson and New Star Games' Mark Baldwin. Main: Efforts from Sony and Microsoft to embrace indie and small studios has seen their role become similar to that of a traditional publisher

Lean, mean, developing machines

Richard Wilson (above) says attending networking events like TIGA's GameDevNights (main) can be instrumental in forging relationships between new developers and potential partners

TIGA CEO **Richard Wilson** discusses the advantages of a lean beginning for your studio and the support available from trade associations

IT CERTAINLY ISN'T easy, but there is no question that building a successful development studio and/or digital publishing business in the UK today could be one of the most rewarding and fascinating goals one could set.

In Eric Reis' book, *The Lean Startup,* he talks about the principle of 'Build, Measure, Learn' – an approach that focuses on making something, releasing it, and learning from the market reaction rapidly so you can innovate at speed.

This sums up the transformation that has happened in games development.

It used to be you would launch the game and wait for customer reaction. Now the 'games as a service' model and the digital marketplace have lowered the barriers of entry for start-ups. The release date is just the beginning.

Whether it's Facebook, iOS, or the forthcoming PS4, with every digital outlet comes the option – and expectation – to release post-launch content and continually evolve your product over time.

You can significantly shorten development cycles by experimenting with iterative products – let the consumer do your R&D for you. How quickly you measure feedback, implement changes and release an enhanced product will be critical; you must be able to continually evolve.

It has been hugely encouraging to see the increase in start-ups across the UK over the last year. In fact, TIGA's own research shows that more than 50 per cent of UK games business started up less than four years ago.

BODY OF SUPPORT

The most common causes of failure in many industries – aside from access to finance – are weaknesses in leadership and management.

Fortunately, this is something TIGA and other trade associations, such as the Federation of Small Businesses and the Institute of Directors, can help with.

As well as providing opportunities for businesses to raise their profile through free and open initiatives such as the TIGA Awards, trade associations should provide start-ups with access to expert business advice, both general and specific. For example, TIGA worked with David Smith at Interactive Selection and a number of developers to publish a best practice guide to selection and recruitment.

It is important for start-ups to have connections with potential investors, and other people who offer commercial opportunities. These contacts can be picked up at information sharing and networking events, such as TIGA's GameDevNights.

As a start-up, you can't do it all on your own. The stronger your network and the more advice you can get, the better a leader you will become.

A note of caution – strengthening your contacts doesn't mean attending everything under the sun. As a lean start-up, time is your most precious resource. Focus on which organisations offer the most contacts you really need.

THRIFTY START-UPS

Whilst spending your time wisely is crucial, so is saving money. Good trade associations should provide you with access to a range of discounted services and professional business advice. Your own innovation is also a core part of saving cash. Again, the more you network with the right people, the more ideas you are likely to have.

The last element I'd like to cover is the quality of your team. As an industry, we compete to a vital extent on the quality of our workforce, and the UK video games business has a lot of fantastic people – as demonstrated by the attempts to poach them from abroad.

Yet as a business owner you must invest in them wherever you can. Workforce development is crucial for business success. TIGA is working with Creative Skillset to help developers to make the most of the Skills Investment Fund, which makes leadership and management training available to start-ups, and helps address skills gaps and staff shortages.

Two key funding schemes are particularly relevant to games development start-ups: a Trainee Network and a Short Course Programme. The Trainee Network helps firms take on new trainees with financial support. The Short Course Programme provides match funding for approved industry training programmes. For more information please contact TIGA and Creative Skillset.

Being lean isn't about not spending anything; it's about spending wisely. Even a small investment in training can go a long way, as it shows your staff you really care about their development.

Work hard, iterate fast, and invest in your network, management skills and people. Good luck.

Richard Wilson is CEO of video games industry trade body TIGA, which is devoted to making the UK the best place in the world to do games business.

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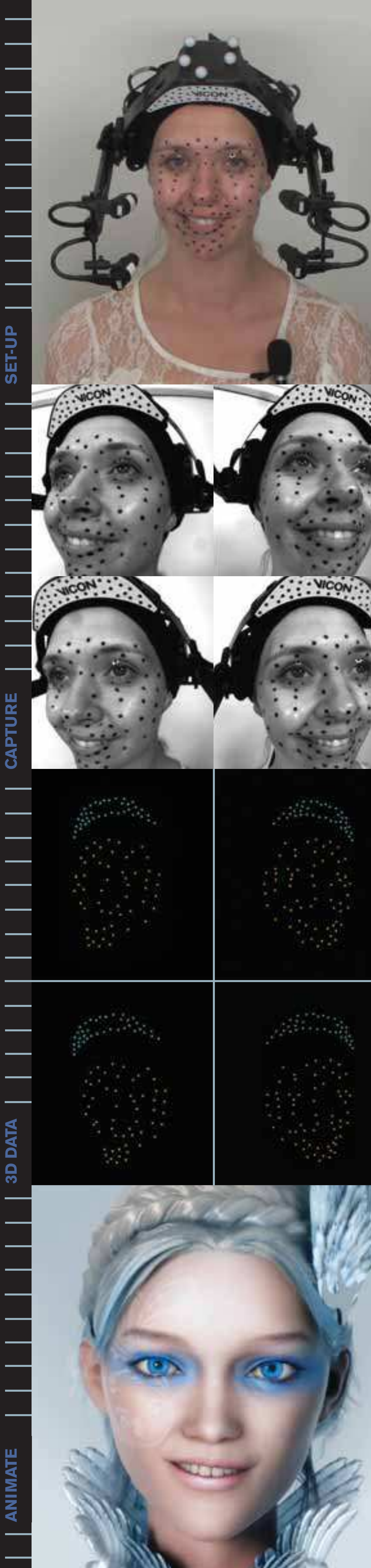

Relationship building as a start-up

Reaching out to other companies and business networks can provide you with the support you need to grow your new studio, says UKIE's Jo Twist (above)

UKIE CEO **Jo Twist** explains why it's vital for new studios to begin forging relationships with other developers, publishers and potential investors from the start

WE REPRESENT DEVELOPERS of all sizes and it's amazing to see the number of fresh, young start-ups that are growing up around the UK.

But whilst we know that the barriers to making and selling a game directly to your audience in this country are currently at the lowest they have been for years, this doesn't mean it's at all easy for start-ups to survive and thrive.

There are lots of pitfalls in running a small business, but the two main issues we hear most about are access to expertise and access to people – whether that be people with whom you can work or people with whom you can do business deals.

When money is tight and every penny is incredibly precious, having a network that you can go to can be a cost-effective lifeline. If you know the right people, you can collaborate on mutually beneficial projects, get advice about how to solve any problems you have in your process (whether it be coding, art or technology), and learn from others who've 'been there, done that', especially about the practicalities of running a business and appealing to potential publishers or investors.

But above all you can strike up commercial deals and partnerships with the people you forge relationships with. This could mean access to money and the ability to scale so that your business grows.

GET CONNECTED

However, forming those relationships in a meaningful sense takes time – especially if, as a small team, your focus is to get the game made and if your team is working in isolation from other games businesses.

There are a great many networking opportunities, whether that be through formal conferences, seminars or informal meetups, across the country. But travel, entrance fees, time out the office are all scarce resources that not everyone has.

Trade bodies such as ours can help alleviate the financial burden by offering members free or discounted access to many events. And we can help online as well as in person. We have a network of nearly 200 UK games businesses, which between them represent the widest possible spectrum of the video games industry.

We see it as a network that can be flexed at different times for different needs, and we make it our business to guide you towards the right people within that network and help share their insights online and in person.

> ***"When money is tight and every penny is incredibly precious, having a network that you can go to can be a cost-effective lifeline."***
>
> Jo Twist, UKIE

The network includes the console format holders (Nintendo, Sony, Microsoft as well as new entrants like Ouya); multi-national publishers; development studios of all sizes (from big triple-A types to many micro studios and start-up businesses). There are also other businesses such as accountants, lawyers, retailers and academics who are all there to help (and of course gain new clients).

Trying to be where you are with the right people is a challenge for a small company like us, but we know that bringing together these experts in one room outside of London, and coming to you instead of you coming to us, is crucial. So too are collaborations with like-minded networks across the country.

You don't have to be member to get some of the benefits of the UKIE network. For example, we like to partner with others such as the Indie Games Collective that brought 100 indie devs and Microsoft, Sony and Nintendo together to speak about developing on next-gen consoles. So whilst you don't have to be a member to benefit from our networking, when you do join you become part of a community. You can use our free facilities and our contacts to put on the event you want, and you can access all the other events and discounts that your UKIE membership brings.

We all need every bit of help we can get in these competitive times, and we make it our mission to help as much as we can. Together we are stronger.

Jo Twist is CEO of UKIE, a trade body for the UK's interactive entertainment industry, which exists to champion the interests, needs and positive image of all those across the video games and interactive entertainment industry.
www.ukie.info

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Can you handle your own PR?

New developers may think they're ill-equipped to promote their games by themselves (main), but Press Space's Natalie Griffith (above) says handling your own PR is simpler than you think

Many new studios focus on independent games, but they still need to promote those titles. **Natalie Griffith**, owner of Press Space, offers advice on how to handle your own PR

YOU MAY HAVE leapt into living the indie dream because of the game you want to make, but if you want that game to be a commercial success then you need to think about PR, too.

So far, so obvious, right? There are new articles written every day about the challenges of discoverability, about making sure you have a strong hook to interest the press, and about making sure you put aside time for properly promoting your game. All of that is true, of course, but it's also important to make sure you're thinking about PR from the minute you set up shop, and certainly long before your game's released.

For many indies, the thought of tackling PR is something that sits tugging at their sleeve like an irritating house elf – you know you need to deal with it but you just can't face it, and you don't know what to tell it to do, even if you could look it in the eye.

Like all procrastinated jobs, it gets harder and harder to know where to start the longer you delay. But with a little forward planning, and a realisation that you likely already have most of the skills you're going to need, it can be a whole lot easier.

There are several really important reasons for a new start-up to embrace promotion as early as possible. It all comes down to time; time to learn lessons, to establish efficient systems, to build relationships, and to tell your story.

LEARNING

PR is all about thinking clearly and creatively, about planning ahead and about scheduling your time sensibly – sounds like making a game, right? You *do* have the right weapons in your armoury even if you don't yet know how to use them. But if you start straight away then you'll give yourself the time to experiment, learn lessons and make mistakes – all without staring down the make-or-break barrel of an impending game release.

PLANNING

Set up supporting PR systems now. It's the same as when you choose which engine to use, plan your workload, or schedule freelancers to provide assets – starting early means it'll become second nature to use your PR systems by launch.

It'll also mean you're prepared: sort out boring stuff like Excel docs to keep track of which journos you've interacted with, set up Google alerts on your company and game names, and build time in to your development schedules to account for making trailers, taking good screenshots, and writing compelling text to describe your game. All these things take longer than you expect at first but don't panic – it'll all get easier and quicker the more you do it.

> ***"Let fans get to know the personality behind the game, bring them along on the journey and they'll want to help you spread the word."***
>
> Natalie Griffith, Press Space

RELATIONSHIPS

Building them takes time, in real life or on Twitter, but without strong relationships with the media, with other developers or with fans of your game or genre, then where will your evangelists come from?

Go to events, write blogs or articles, engage on Twitter and start to build a community as early as you can. There's no effective way to shortcut this process. Let people get to know the personality behind the game, bring them along with you on your development journey and they'll want to help you spread the word.

STORYTELLING

Just as you'll carefully plan your game design to gradually reveal story details or introduce new mechanics to engage players, so too should you look at the bigger story you're telling outside of the game and plan its course carefully.

Think about your journey as a developer, where you've come from and where you're going. Make sure you really understand what you're trying to achieve. Document those goals then share that vision consistently with everyone: your team, other indies, journalists, gamers, and everyone in-between.

Think of everything you share on any channel as just another step in your broader story 'arc'. Does your tweet fit with what you've shared before? Is your blog post progressing your story in a logical way? Is that video going to make sense in the context of the press release you've just issued?

So start your PR journey right now. Learn, plan, build relationships and plot out your story – no one can tell it better than you and no one's going to.

Natalie Griffith, owner of indie PR agency Press Space, has been in the games industry since 1991 and has spent 13 years in PR.
www.PressSpace.net

Navigating the legal minefield

Nic Murfett, associate at law firm Harbottle & Lewis, describes the legal pitfalls that new studios need to avoid when setting up shop

WHEN SETTING UP a studio, there are a number of legal issues to consider. But provided that you know what to look out for and plan ahead, there really isn't anything that need keep you awake at night.

So, what are some of the main issues that you will need to consider and the most common mistakes you should avoid?

TRADEMARKS AND DOMAIN NAMES

Carry out trademark searches by using www.ipo.gov.uk to check that somebody else hasn't already registered the intended name for your studio. If they have, choose another name. If they haven't, consider registering it but first discuss the costs and benefits with a lawyer.

A common misconception is that registering a company at Companies House ensures that the name is protected as a registered trademark. This is not the case.

Consider also searching for domain names that use your studio's name via whois.net. If the .com intended for your studio isn't available, someone else may already have your studio's name as a trademark – perhaps as an unregistered trademark or one registered outside the UK. If the .com is available, consider purchasing it and any other variants you can afford – .net, .co.uk, .org, and so on.

LIMITED COMPANY

Setting up a limited company brings with it various benefits, including limited liability.

Incorporating a limited company is relatively straightforward and can be done in a matter of days. You will need to ensure that your studio's incorporation documents and Articles of Association are filed with Companies House.

If your budget is tight, you may wish to consider adopting a do-it-yourself approach to incorporation. You can also consult companieshouse.gov.uk for more information. Once incorporated, your studio will have to pay corporation tax on its profits and so will need to register with HM Revenue & Customs.

SHAREHOLDERS' AGREEMENT

One of the most common misconceptions about incorporating a limited company is that making a shareholders' agreement is an immediate requirement.

In fact, if you are seeking third-party investment or are likely to do so, instructing a lawyer to draft a shareholders' agreement may be an unnecessary expense. Investors will invariably make their investment conditional upon any existing shareholders' agreement being amended to reflect their (often extensive) demands.

In the absence of a shareholders' agreement, shareholders are still protected by law in certain respects. For example, two shareholders each with a 50 per cent shareholding would automatically have joint voting and decision-making rights.

IP RIGHTS

As your studio's success is intrinsically linked to your IP, make sure that anyone (including family and friends) who undertakes work for your studio assigns their IP rights to your studio. Without this, the IP rights in any such work would be owned by the individual who created it – unless they are an employee, in which case their employer will own them.

Also, although contracts can be established orally, IP rights cannot be legally assigned unless the assignment is in writing. You therefore need written contracts. Your studio's contracts should also contain robust confidentiality provisions to prevent any confidential information being disclosed to third parties without your consent.

EMPLOYMENT

If your studio employs any staff, it will be legally required to obtain employers' liability insurance. If it does not do so, your studio will be liable to a substantial fine for every day that it remains uninsured.

Tax effective employee incentives, such as EMI options, can help align the interests of your employees to the success of your studio. Options can be very tax efficient and help incentivise employees without the costs of salaries and bonuses. For more information on such schemes, check out hmrc.gov.uk or contact a lawyer.

RAISING FINANCE

When thinking about how to raise seed finance for your studio – including if you are getting any financial support from friends and family – consider the Seed Enterprise Investment Scheme. This is a tax incentive designed to help smaller companies in their early stages raise equity finance by encouraging individuals to invest in them.

It's very generous, and offers income tax relief at a rate of 50 per cent of the invested amount, irrespective of the income tax rate that applies to the investor. Although the maximum amount that can be invested in a company is £150,000, this could be extremely significant in helping to launch your studio.

Nic Murfett is an associate at Harbottle & Lewis LLP, which provides strategic and commercial legal advice to dynamic and creative clients. **www.harbottle.com**

New developers need not fear a court summons (main) if they take the proper precautions when establishing themselves as a company, says Harbottle & Lewis' Nic Murfett (above)

Have you forgotten anything?

Rounding off our start-up special, studios new and old offer their advice to future developers about those tricky first steps and other vital things to remember

“LEARN about accounts, tax and business – or pay someone else who already knows. Use great, bulletproof contracts or don't use anything at all; anything in between causes headaches. Stick to your guns, but don't be an arsehole: you are what will make your company unique, and therefore make both it and your products valuable. Oh, and expect grey hairs.”

Andrew Smith
Managing Director, Spilt Milk Studios

“WHEN you're new, expect to get rejected a lot by press and publishers because, let's face it, it's tough being the new kid around. When you send out press kits and show your game to publishers, expect to be ignored or told "we feel it's not quite a right fit now". But do you give up after your first try? Hell no! You work some more on the game, try again and tell them what's new.”

Dan Kenny
Creative Director, Eyesodic Games

“DON'T underestimate how much work goes on with the business side of things. I probably spend 50 per cent of my 'Zero Dependency time' catching up on emails, dealing with expenses, and other activities not directly related to game development. Also, if you're an indie coding at home, think about your 'office space'. I couldn't sit on the sofa and write low-level graphics code, so I have my desk and PC at home set up to reduce distractions.”

Andy Esser
Lead Programmer, Zero Dependency

“NEVER overinflate your self-perception. Be humble, understand your weaknesses and be constructively critical. Review your project often. Listen to all members of the team. Always get a second opinion from an industry source or your consumers. Partner where possible – think about who could help bring your game to market. Don't be afraid to take your time because when your game is ready, it'll speak for itself.”

Jay M Bedeau
CEO, Rie Studios

“BE fussy in choosing your team. A strong, capable team will make the whole thing much easier, but if they are weak you will always be papering over the cracks. Try to find people brighter and better than you are, and keep them happy. You may not be able to pay them a fortune but be prepared to listen and you will have a motivated team. Believe it or not, most people value 'please', 'thank you' and 'well done' more than a free coke machine.”

Stephen Swan
CEO, Waterfront Entertainment

“ONCE your business is ready, we would recommend that focus should be placed on securing and funding your first office space. Remote working wasn't ideal for us but as soon as we moved into our office, things started to move a lot quicker. And make sure that all of the team are behind the 'idea'. Your initial core team needs to be prepared to work long hours, undertake several projects and do what it takes to make the company a success.”

Grant Alexander
Commercial Director, Beartrap Games

“UNDERSTAND why others failed. People have probably tried your idea before. Was it the wrong platform? Poorly executed? Is this truly an idea whose time has come or are you destined to repeat the mistakes of others? Watch your back, too. If it is a good idea, others are probably working on it. It's tough to take customer discovery seriously, raise money, recruit staff and maintain secrecy at the same time.”

Simon Hade
COO & Co-Founder, Space Ape Games

“ASSIGN clear responsibilities. Roles in a start-up studio are usually quite blurred. Everyone tends to chip in where they need, but responsibilities must be clear – otherwise you end up with decision by committee, which rarely achieves anything. Take as much as advice as you can, from as many different people as you can. Consider it, and then make your own decision. Don't follow other people's advice blindly.”

Ella Romanos
CEO, Remode Studios

“LOOK at the trends, but try to think differently. Early in 2010, we were told consoles and handhelds were dying, but I think it was an error to follow this advice. We did some contract stuff on smartphones, but that's not what we wanted to do. Now, we are porting one of our games to Vita – it's the best platform for it. And Vita is great for a small company: costs are lower, so you need less sales to make a profit.”

Eloy Ribera
CEO, Ninja Fever

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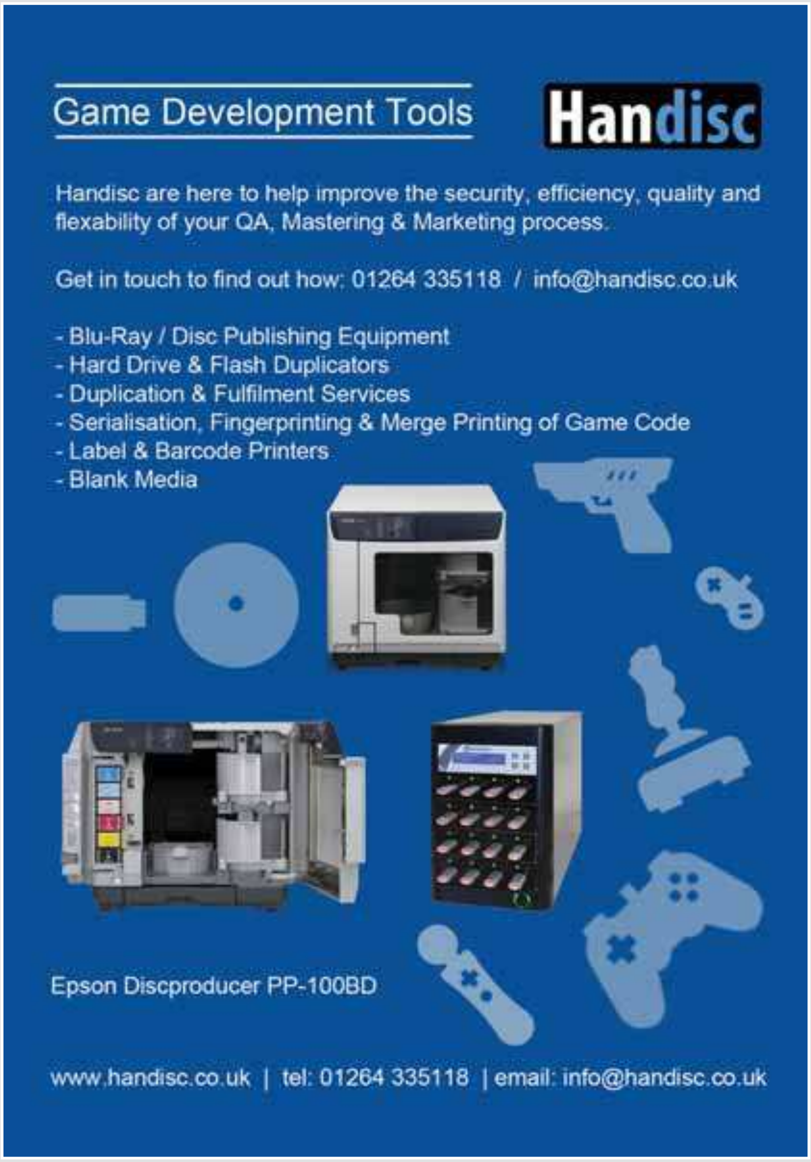

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Northern exposure

Newcastle-upon-Tyne and the surrounding area is home to some of the UK's most productive games studios. **James Batchelor** takes a closer look at how these companies are working together to grow the region's talent pool

Top-to-bottom: Julie Dodds (top) from the Newcastle Gateshead Initiative and CCP's Richard Smith. Main: Representatives of North East developers at the Game Kettle roundtable

YOU MIGHT BE surprised by the games being developed in the North East.

It's not just racing games like the *Driver* series and *NASCAR*. There are also some triple-A blockbusters and other popular franchises in the works, with local studios contributing to the likes of *Watch Dogs, Just Dance, LittleBigPlanet,* and *EVE Online*'s companion shooter *Dust 514*.

In fact, it's not just games. Developers in the region have already got their hands on next-gen technology, or are collaborating with other entertainment industries.

"Pitbull is working on Unreal Engine 4," declares Carri Cunliffe, director of Secret Sauce and North East developer network Game Kettle.

"People don't realise that they're doing that in the North East of England. There's no way you would identify any of the titles developed here as a North East game. They don't look regional – there's lots of global IPs."

Atomhawk MD Cumron Ashtiani adds: "We've worked on *Driver, Dead Island* and *Mortal Kombat*, but we've also helped with *Thor: The Dark World* and a few other movies – this stuff is being done in the North East. I tell people what we do and they assume we're working in Soho. They almost do a double-take when we say we're based in Newcastle."

It's a collective portfolio as varied as the studios behind it, which range from publisher-owned firms like Ubisoft Reflections to development stalwarts such as Eutechnyx and Pitbull – not to mention hundreds of smaller studios and indies.

And the best thing, according to Eutechnyx CEO Darren Jobling, is that this community has grown organically.

> **“*I tell people what we do and they assume we're in Soho. They do a double-take when we say we're based in Newcastle.*”**
>
> Cumron Ashtiani, Atomhawk

"It's not been manufactured," he explains. "The talent was here first, so all the early companies set up from that. A lot of people presume that it's a university thing, but in fact it was an entrepreneurial thing."

Perhaps more impressive is the extent to which these North East developers are willing to assist each other.

"Almost all studios now collaborate with other teams in some capacity to fill staffing requirements at different stages of development," says Joe Stevens, MD at Newcastle-based start-up Whispering Gibbon.

"This helps us greatly: we're able to do work-for-hire for bigger companies between working on our own IP. We also collaborate with many local companies so that we can fill each other's skills gaps."

Ashtiani adds: "If someone wins a big contract, that tends to feed a number of different companies through collaboration or subcontracting. I don't think you see that so much in any other region – and you certainly didn't see that ten years ago."

Nosebleed Interactive MD Andreas Firnigl adds that even the start-ups are brought into the fold: "That ecosystem of the bigger firms supporting the smaller ones is growing. The Hollywood system is bleeding into the games industry, and in the North East it works quite well."

TALENT SHOW

North East studios are also thriving thanks to the near constant supply of promising new recruits. In fact, Jobling reports that more than 30 per cent of Eutechnyx's team are graduates from Teesside University.

“The North East is a fantastic hotbed of talent,” says Pitbull Games MD Robert Troughton. “It’s backed up by the support of local agencies, such as Game Kettle and Sunderland Software City, and of course the universities, most of which offer games development courses.”

Coatsink creative director Tom Beardsmore concurs: “The talent pool is fantastic. Our entire team is from various North East universities. The vast majority come from Teesside, but we have members from Newcastle and Sunderland, too.”

And this focus on training new developers isn’t solely led by universities, either. Local studios are keen to work closer with these academic institutes to help improve the quality of their students.

“Our courses and the graduates that come out of them are entirely formed by the input of local developers,” says Mick Stockton, principal lecturer at Teesside University. “They tell us what they need and we try to provide that, which is the way it should be.”

Ubisoft Reflections’ general manager Giselle Stewart adds: “Most of the other universities are working towards skillset accreditation – if they haven’t already got it – and it shows a determination to be seen to be the best. There’s only about 20 courses that have skillset accreditation in the UK and most of the courses in our area have it.”

Richard Smith, technical director at CCP Games’ Newcastle studio, states: “One of the local courses has been a great source of talent for us. It’s all part of that self-sustaining ecosystem between the studios and the universities. We all make sure that system continues to work rather than having a ‘survival of the fittest’ attitude.”

It is a testament to the quality of these courses that most of the graduates end up in full-time employment at local studios shortly after university.

NORTH EAST NEWCOMERS

The Government and local councils have also been supportive of the area – not just in terms of games companies, but also firms in related industries.

> ***“Ten years ago, everybody was a services provider or working on console games. Now it’s very much about indie studios. It feels different.”***
>
> Carri Cunliffe, Game Kettle

“There’s been a lot of investment into the IT sector in the region and a lot of council interest in making sure that IT companies can grow and prosper,” says Troughton. “With other industries slowing in the region, they’ve really tried hard to make sure that newer industries take hold.”

James Mintram, MD of start-up Lemon Moose Games, adds: “Gateshead council and Northumbria University have been instrumental in our progress so far. It is probably safe to say that without them, we would be at least a year behind where we are now.”

The influx of new games developers has been a major change in the region and its community, observes Cunliffe.

“Ten years ago, the landscape was very different. Practically everybody was a services provider or working on console games. There were a very limited number of companies who were focused on ramping up team sizes, and everything was getting more expensive.

“Now, it’s very much about independent developers. There are still console studios, but there are more people setting up smaller, boutique indie games companies and it feels very different.”

But Game Tonic MD Phil Ward warns: “I’ve seen a lot of studios come and go in the last five years, so even though it’s a great area to be, it’s still a volatile market.”

LIFE UP NORTH

To some, it’s no surprise that such a successful community of developers and universities has grown in the North East. Local firms say the benefits of the area make setting up in the region a no-brainer.

“We have great rail and air links, we have a lower cost of living than many major cities, and we have great universities and colleges offering great courses and producing some great potential employees,” says Hippo Entertainment MD Darren Falcus.

Julie Dodds, senior investment manager at marketing and management agency Newcastle Gateshead Initiative, adds: “There’s a lot of skills and access to talent here in comparison to the rest of the UK and even Europe. Operating costs are lower, and there’s greater access to Government grants. And then there is the real sense of community – you don’t get that anywhere else.

“I don’t think people realise the strength of the cluster here or the types of companies in it. Part of our job is to change that perception.”

And the games developers that are already established here share one more thing: a sense of pride in their area.

“I remember the buzz when people found out you could drive around the Newcastle quayside in the first *Driver*,” Teesside University’s Stockton says.

“A lot of us are still here because the community has been built around passionate people who just happen to work in the same industry: making great games. And that’s driven from the top down.

“We have a lot of start-ups here; some will fail and some will succeed, and the latter will help continue this community for future companies.” ■

Top-to-bottom: Game Tonic’s Phil Ward, Ubisoft Reflections’ Giselle Stewart, Eutechnyx’s Darren Jobling, Teesside University’s Mick Stockton, and Atomhawk’s Cumron Ashtiani

Grand dukes of Yorkshire

Home to some of the UK's longest-serving development veterans, Yorkshire is a thriving hub for games studios. **James Batchelor** finds out how local firms and developer network Game Republic are keen to improve the quality of games design graduates and attract more publisher investment to the region

Representatives of Sumo Digital, Revolution Software, Just Add Water and more discussed both the benefits and disadvantages of building a business in Yorkshire at a Develop roundtable last month

DEVELOPERS HAVE BEEN coding games in Yorkshire since the early '80s. The region's showcase of hits ranges from Charles Cecil's ZX81 title *1K Chess* and Gremlin Graphics' *Monty Mole* series to more recent ventures such as Sumo Digital's *Sonic The Hedgehog* racing titles.

It's a heritage that has inspired many of the developers now working in Yorkshire today, some of which attended a *Develop* roundtable at the offices of 3volution Solicitors in Leeds.

Jamie Sefton, managing director of local network Game Republic, says: "I remember seeing *Monty Mole* on *Look North* in the early 80s. At the time, to see any computer game on TV was unheard of. And it was made in Yorkshire at the time of the miner's strike – it was an amazing thing to see. It made me realise that games could be a mainstream thing. But I never thought it would get to where we are today."

And almost all of those '80s pioneers are still with us today, albeit spiritually through the newer developers. Sumo Digital, for example, was founded by 12 ex-Gremlin members, while Cecil still heads up *Broken Sword* creators Revolution Software.

While other legends of games development have moved on to other things, Yorkshire's finest are still committed to games – whether they're heading to traditional consoles or some of the newer formats.

"The onset of digital has allowed that to happen," says Insight For Hire's Martyn Brown, best known for co-founding Yorkshire-based *Worms* maker Team17. "It's been a transition for the industry. Everything was packaged goods up until 2004, and then 2005 onwards digital arrived. That changed things."

Sumo Digital studio head Paul Porter adds: "Now there are less studios around like us, but there are a lot of studios that have started and evolved doing mobile and handheld games. You couldn't get a more diverse group of people around the table in terms of games being developed."

> ***"There's an awful lot of talent in York, lots of new start-ups, good transport connections, plus access to grants and funding."***
>
> Noirin Carmody, Revolution

Even beyond the roundtable, the spectrum of games development is broad indeed. Just a few miles away is the offices of The Blast Furnace, the new Activision studio behind the mobile hit *Call of Duty: Strike Team*, and Rockstar Leeds, which contributed to this year's blockbuster *GTA V*. It's a hits list any region could be proud of.

A MATTER OF SKILLS

Developers agree that investment from giants like Activision and Rockstar benefits Yorkshire, but it does raise an ongoing issue.

"I wonder where the staff will come from," says Brown. "There's a finite limit of resources in the area. I was involved in setting up the Activision studio, and it was hard work filling that place.

"Once we'd established the studio, it was easy to get people to come up from other regions but depending on the staff you're looking for, it has become more difficult than it used to be. It's great to get new starters straight out of university, but getting seasoned developers is tough."

Local universities claim they are doing their best. Jacob Habgood, senior lecturer in games development at Sheffield Hallam University and former Sumo and Gremlin employee, cites the high employment rates of his graduates and argues there are more pressing concerns.

"We've had lots of students that have gone straight into jobs at Activision, Distinctive, Sumo and so on," he says. "But it's always been difficult to meet the industry's expectations in a three-year course.

"I'm also concerned about the deskilling of tools like Unity, in terms of what our students learn. Don't get me wrong, I think you can create fantastic things with those tools, but I wonder if you can create fantastic students."

Simon Barrett, MD at indie Four Door Lemon, agrees: "That's the problem we see. You find less technical people that can fix problems encountered with Unity because they've no idea what's going on under the hood. It's great for producing certain types of games but we'll end up with no tech talent

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PLACING PROFESSIONAL PEOPLE IN PROFESSIONAL PLACES

Members of local network Game Republic often meet up to discuss industry issues, and even support each other on their projects

whatsoever in a few years' time if we're not careful."

Revolution Software co-founder Noirin Carmody says programming is not the only area in which students are lacklustre: "We really struggle to get good quality, skilled artists. Currently most of our art is produced by people overseas. It's not just a tech shortage, it's right across the board."

And, says Distinctive Games' MD Nigel Little, the increasingly broad range of jobs in the games industry makes teaching the relevant skills even more challenging: "It's not just about programmers and artists – there's so much more to it now. There's analysts, community managers, web app programmers and lots of different roles that need filling."

INTERN AFFAIRS

Both universities and developers are trying to help improve students' employability.

Game Republic runs a student showcase every year, inviting studios to see graduates' final year projects. In fact, several Game Republic members hire new recruits as a direct result of this showcase.

Meanwhile, Sheffield Hallam is one of many institutes in the region that is Skillset accredited, and it even runs placement programmes, sending students to work with the likes of Sumo to gain real experience.

"Our placement programme has been what I can only describe as frustratingly successful," studio boss Porter says. "We don't like giving them back for the final year, but we know we've spent the time investing in people that are really good and hopefully they're keen to come back when they are available."

There's still plenty of room for improvement. Many studios agree there seems to be confusion within academia about certain terms. When an applicant claims they have studied games design, for example, their skills often only extend to level design. It's a source of much irritation.

> ***"More people are playing games than there ever have been, so I only see the region continuing to thrive and grow."***
>
> Paul Porter, Sumo Digital

"I receive far too many game design graduates, but the vast majority are just no good to get employed," says Little. "There's too many of them coming through the system – that seems to be a problem. Programmers are more difficult to find."

It's not all bad news. One thing the studios all agree on is that there are many benefits to running a games development business in Yorkshire – though there is an ongoing but light-hearted dispute about which city serves as the best base.

"York is one of the most amazing cities in the UK," says Carmody, to much exaggerated disagreement from Sheffield and Leeds devs.

"There's an awful lot of talent there within York University, lots of new start-ups in the area, plus access to grants and funding. There were also the transport connections: it's two hours to wherever you need to go: London, Manchester and so on."

Barrett adds that it's handy for local game enthusiasts: "One thing we've seen recently is people who have grown up here are coming back to work in smaller studios. They've been to Canada, worked on huge 1,000-people teams and want to move back to being on a 15-man team.

"That's been great for us, because it means we can offer those people something a bit different where they feel more involved with the whole process."

Just Add Water CEO Stewart Gilray agrees: "Half our team is Scottish – if they want to go home and see their families, it would be eight or nine hours from London, whereas it's only three or four from here. The cost of living is cheaper, as well."

NETWORK IN THE NORTH

Yorkshire developers are also thankful for the community spirit they share with each other, due in no small part to the ten-year-old Game Republic. The firms regularly discuss projects and issues, share information and resources, and even lend each other dev kits.

Alex Amsel, MD at developer Tuna, says: "It also makes it a lot easier to find people to

Whats on Next @ The Adelphi
GAMEREPUBLIC

Game Republic recently celebrated its tenth birthday. Some of its founders, including Insight For Hire's Martyn Brown and Revolution Software's Charles Cecil are still active members

▶ work with. If you know local companies, you can sub-contract to them. And there are five cities within an hour of each other, which makes it easier to exchange things, change jobs, meet up. It's a good community."

Such collaboration is nothing new. It's an attitude that dates back to the early years of Game Republic, says Craig Albeck, Sumo Digital's head of business development and Game Republic's project manager between 2004 and 2008.

"When I was at the helm, it was run by its members for its members," he says. "The list of our objectives and the things we're still talking about don't come from the government. It's us thinking about what we need to make our businesses more attractive.

"Back then, we were thinking about how we could attract the big third-party publishers. The introductions we get are very valuable, and then that self-perpetuates because we pass it on."

Amsel adds: "If Game Republic hadn't been started, I'm doubtful that a lot of us would still be here. Obviously there would still be successes, but I think it would be much more disparate. You can see it in other places – the North West has studios going under and people not knowing what to do. I think Game Republic's kept everyone together and nurtured the start-ups."

> ***"We don't need to be in London to speak to Sony. The internet has allowed us to work where we want with no obstacles."***
>
> Stewart Gilray, JAW

There is still some degree of Government support. UK Trade & Investment fund a number of companies in Yorkshire, including those in the games industry, through grants. They have been particularly keen to help get local developers out to events like GDC in San Francisco to show off their projects.

"We wouldn't have been able to go to GDC in 2009 if it wasn't for that," says Gilray. "And while we were there, we met the *Oddworld* guys, and because of that we're doing what we're doing today. That's four years of business for us already – and that can only be a good thing.

"Right now, we're dealing with Sony Europe in London, Sony San Matteo and Sony in Tokyo. We don't need to be in London to speak to these companies. We can be anywhere because the internet has allowed us to work where we want to work. There are no obstacles any more.

"That's the thing that makes it great to work in Yorkshire, because we can live here because we want to live here, but we can still do the work we'd want to do anywhere else."

Albeck adds: "That wasn't possible five years ago, because if you were a small company, who would you contact unless you already knew them? The landscape has changed thanks to the digital age."

Game Republic's Sefton concurs, although he argues: "It's still the personal introductions that can be the most helpful. Business is all about people working with each other, and you get on better with people that are good fun. All the companies I've worked with in Yorkshire are like that."

The changes to how we communicate, how we develop and release games products and how the industry is structured has only benefitted Yorkshire. And local studios are confident that this is not about to change.

"The bottom line is there are more people playing games than there ever have been, so I only see the region continuing to thrive and grow," Sumo's Porter says.

"There's a great pool of talent here. The more studios that are here, the more people will be attracted here, and the better we'll all do as a group of companies."

Tuna's Amsel adds: "I think a lot of the people that are left in the games industry – certainly in this area – are a lot more flexible than they were five to ten years ago. No one knows what will happen with this console transition, but I think everyone here's flexible, from the indies to studios like Sumo, to be able to deal with that."

ROCKSTARS OF THE NORTH

It is the reception for *Grand Theft Auto V* that is perhaps the greatest cause for optimism. As Revolution's Camody observes, the widespread coverage behind the game was largely positive, indicating a shift in the mainstream media's perspective on video gaming and, by extension, the UK games industry.

And while that blockbuster was primarily handled by the Edinburgh-based Rockstar North, there's still more than a little Yorkshire in its code.

"Rockstar Leeds were involved in the making of that game," Carmody reminds us. "We really have got a lot to be proud about here in Yorkshire.

"As an area, people work together and support each other. That's not just within gaming, it's part of the Yorkshire psyche and it makes this a fantastic place to live."

Sheffield Hallam's Habgood adds: "As a southerner who lives up north, a lot of my people have a very outdated idea of what Yorkshire's like. If you get off the train at Sheffield station and walk into the city centre, you walk into a really modern city and it's the same with other areas across Yorkshire. That's not necessarily what people think of in London."

Sefton admits: "There's a perception issue that we need to still work on."

"You mean keep a secret?" Porter laughs. "They can stay down there. We'll have all the fun up here." ■

710
USA
THE TREASURY
AWESOME HEALTH CARE

Calling all start-ups

With so much support available to start-ups from Microsoft in the UK, which is the right one for you? And how has it helped other small teams?

Over the next pages, you'll find out.

As a result of a great deal of effort Microsoft has helped increasing numbers of start-up studios in recent months.

It has done so through a wealth of support that is presently available to assist games developers in building their companies, funding their ideas, making and publishing their games, and reaching the ever-expanding audience that today uses Windows 8 and Windows Phone 8 for entertainment.

Indies, young teams, students and old hands that have returned to their roots have all benefitted from such initiatives recently, but with so many forms of support available, it can all be a little intimidating. Which is available to your team, which gives you what you need to make your dream game, and how can you harness the potential of more than one Microsoft initiative?

Fortunately, the answers to those and many related questions are straightforward, and Microsoft is here to make clear how it can help your start-up – be it fresh out of University or close to five years in business – build better games, and a better business.

At the core of the offering from the team that can take your games to Windows 8 and Windows Phone 8 are the BizSpark and DreamSpark offerings, which both give you free access to a range of development tools and tech that can be used to publish your games on Microsoft platforms and beyond. DreamSpark is best suited to students and the most youthful teams, while BizSpark serves those with a development outfit set up that need a little help establishing a technology base.

Elsewhere the AppCampus mobile application accelerator programme presents an €18 million joint investment between Microsoft and Nokia to foster mobile application development on Windows Phone. Created in conjunction with Aalto University in the development hub that is Espoo, Finland, the initiative provides successful applicants with awards varying from €20,000 to €70,000.

Meanwhile the UK version of the global Microsoft Ventures Accelerator provides a 12-week programme of training and mentoring to help not just with games design, but to better your team's standing as a company, calling on experienced mentors and business experts.

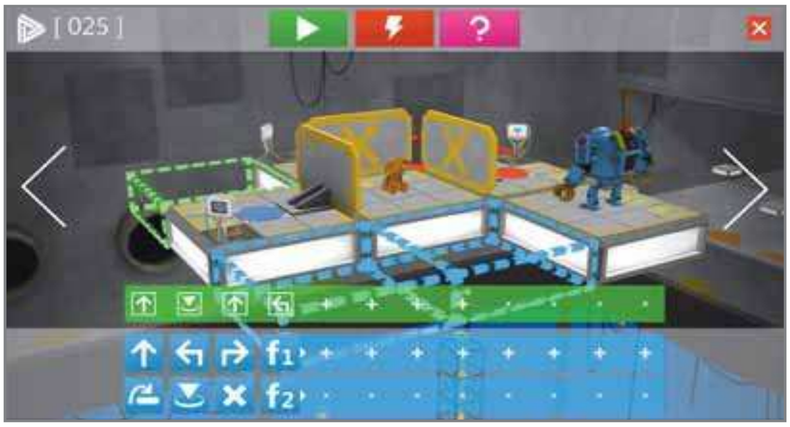
And then there's Greenshoots, which is currently in its first iteration. Delivered in tandem with Microsoft and Creative England, a national company that invests in and supports the creative industries, Greenshoots is providing 10 teams working on their new games with up to £25,000 each in match funding.

Most importantly, if you're a start-up and can meet a few simple criteria, there's almost certainly a Microsoft initiative above that will be suited to your team. And better still, you can quite possibly make use of more than one.

Over the following pages, you'll meet some of the teams signed up to those programmes, see how it has thrust their studios towards a successful future, and find out all you need to get involved. Read on, as it might just change your studio's standing in the global development community.

Microsoft

CASE STUDY 1: Nice Touch Games



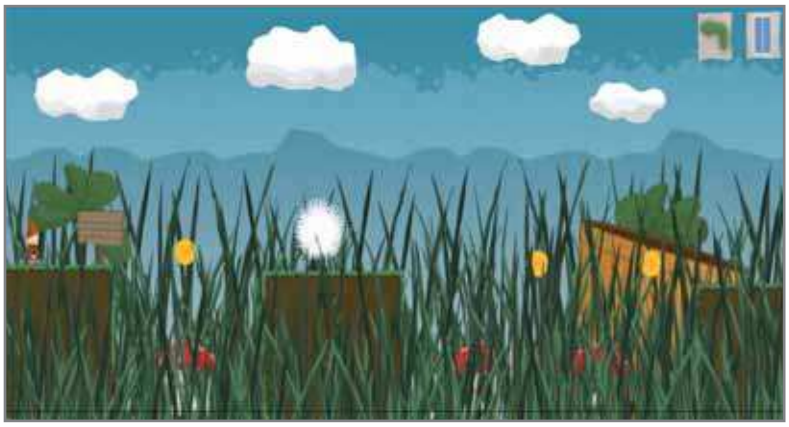
A small, tight-knit team, Nice Touch Games formed when a group of friends together left Sony Computer Entertainment to make the playful games they had long wanted to craft. As part of Microsoft's AppCampus initiative, the studio has already completed its Windows Phone 8 game Robo & Bobo, which has also seen release on iOS.

"I think a lot of developers involved in AppCampus are new to the industry, so AppCampus can offer a lot in terms of the basics on how to release an app as the process can be daunting," says Nice Touch developer David Green. *"We've released a few titles already, so for us the AppCampus fund gave us the opportunity to get a fantastic artist on board and really raise the artistic level of our last two titles."*

The team has also made much use of the free Microsoft tools and support provided to Nice Touch through the BizSpark programme, and looks set to establish itself as a studio with a very bright future.

"Funding an indie studio can be a heavy burden so any help is much appreciated," explains Green. *"BizSpark gave us the opportunity to move from the express editions of the Microsoft toolset – which we think are great on their own – to a much better pipeline. We believe AppCampus and BizSpark prove how invested Microsoft is at helping indie developers get onto their platform, and it's a great platform,"* he concludes.
www.nicetouchgames.com

CASE STUDY 2: Gnome Factory



One-man outfit Gnome Factory is the brainchild of student developer Josh Naylor, who has proved that even the smallest of studios can benefit from partnering with Microsoft.

Naylor had dreamed of a career in games, but didn't want to pull his wife and child away from their relatives. And it was Microsoft's BizSpark, which primarily provides tools and support to start-up studios, that let him realise that ambition by giving him all he needed to develop games without moving his family to a hub like London.

"Never in a million years would a small start-up be able to afford such professional tools without some serious investment, and this is even more the case for student start-ups like myself," explains Naylor. *"What I've been able to access with BizSpark is truly unbelievable, and I really appreciate all this free software, support and visibility. And this is for three years; the whole package, from Visual Studio to Build Your App to Azure services to store users' data in the cloud, everything is possible with this package."*

Currently hard at work on 2D infinite runner Magic Mushroom Dash for Windows Phone, Naylor says he has also been inspired by the start-ups that before him have been thrust into the games industry's centre stage through Microsoft partnerships, such as Dlala Studios co-founder and former Develop cover star AJ Grand-Scrutton.
www.facebook.com/TheGnomeFactory

DreamSpark

HOW IT WORKS 1:
BizSpark

The Microsoft BizSpark program provides technology, support, visibility, and community to promising start-ups and entrepreneurs at no charge. Members receive immediate access to current, full-featured Microsoft software development tools, platform technologies and server products to build software applications. BizSpark members also get monthly Windows Azure benefits enabling them to quickly build, deploy and manage web applications.
www.microsoft.com/bizspark

HOW IT WORKS 2:
DreamSpark

DreamSpark is simple; it's all about giving students Microsoft professional-level development and designer tools at no charge so you can chase your dreams and create the next big breakthrough in technology – or just get a head start on your career. Microsoft believes that students can do amazing things if they only have the right tools. DreamSpark gives you the chance to develop world class software, web applications, cool and creative designs as well as amazing games
www.dreamspark.com

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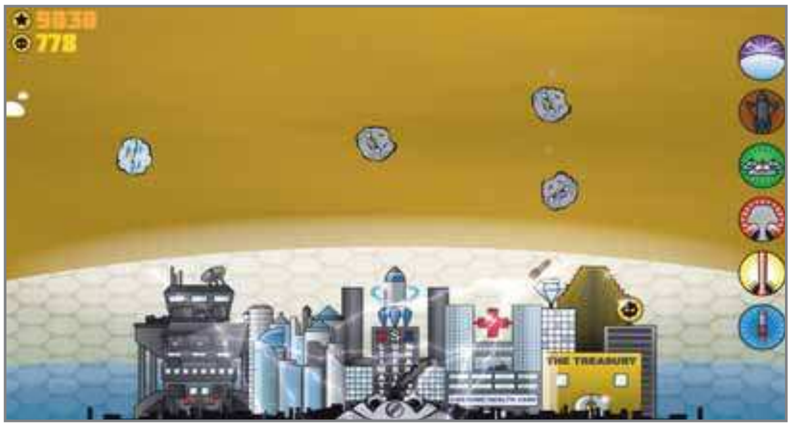
Full terms and conditions for each of the above programmes/initiatives can be found on the website of the relevant programme/initiative.

CASE STUDY 3: Beard Bandit

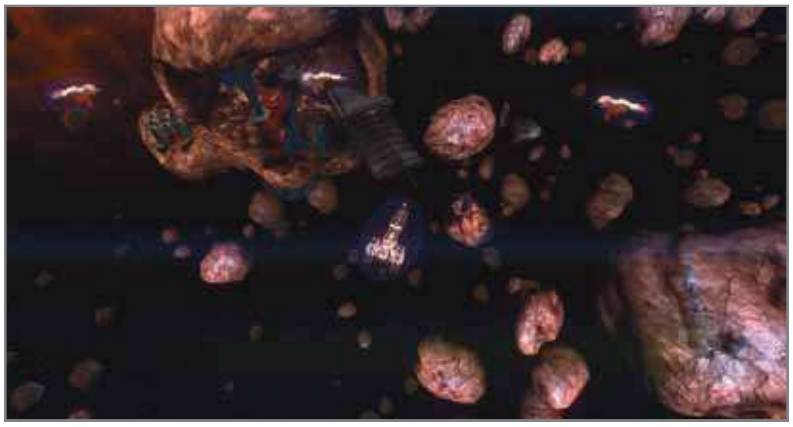


Much like Gnome Factory, Beard Bandit set out to form a unique studio without having to leave their home town, and having been introduced to Microsoft support through the student-focused DreamSpark initiative, saw partnering with the technology giant as a way to fulfil their dreams. The trio is currently at work on Windows 8 game Comet Chaos, which makes use of a broad spectrum of tools provided for free through the BizSpark programme, allowing the Beard Bandits to implement everything from Achievements to leaderboards.

"As an Independent studio BizSpark has given us the tools and accessibility to apply our skills and do what we love," confirms Beard Bandit co-founder John van Rij. *"This combination of services has been perfect for a bunch of poor students to be able to start up their own studio right out of University. Comet Chaos relies heavily on cloud services,"* he continues. *"The Azure service and credit available through BizSpark means that we can launch our game and support a large number of players without having to pay a penny. It also provides a number of authentication methods."*

Thanks to BizSpark, the team has also managed to position itself as a service provider, offering everything from 2D game development to character design and illustration. *"Microsoft really is a company that cares for the little guys,"* concludes van Rij.
www.beardbandit.com

CASE STUDY 4: Gateway Interactive

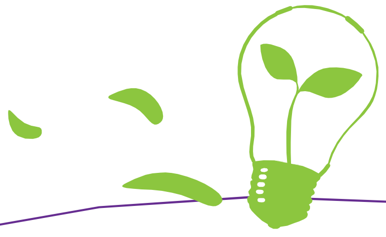


If Gateway Interactive demonstrates one thing, it is that start-ups should not be shy about harnessing as many different support packages as possible.

The team is currently in the process of applying to the Microsoft Ventures Accelerator programme that has also been so useful to GallantCloud (see over), and like many teams is enjoying access to the free development tools and support as provided by BizSpark.

Gateway Interactive, which is developing the impressively polished action-strategy title Pure Space for cross-platform, is also on board with the Microsoft and Creative England match funding initiative Greenshoots, which may provide the team with up to £25,000. *"Pure Space is designed to be a truly next-generation game powered by the rapid growth in cloud services made available to us over the last few years, and where we truly believe the next generation will come into its own,"* enthuses Gateway Interactive 'dungeon master' Louis Deane. *"Our game uses an in-house technology which we call 'Nomadic Gaming' using a cloud system that runs in Microsoft Windows Azure."*

The fact that Gateway Interactive is already building games through its own proprietary tech is a testament to the start-up's ambition, and demonstrates what can be achieved when backed up by BizSpark and empowered by the possibility of the Accelerator and Greenshoots support. *"The aforementioned Nomadic Gaming architecture was developed as a direct result of working with BizSpark, it gave us unparalleled access to platforms and technologies that would otherwise be far outside of the budget of a smaller studio like ours,"* concludes Deane.
www.gatewayinteractive.co.uk



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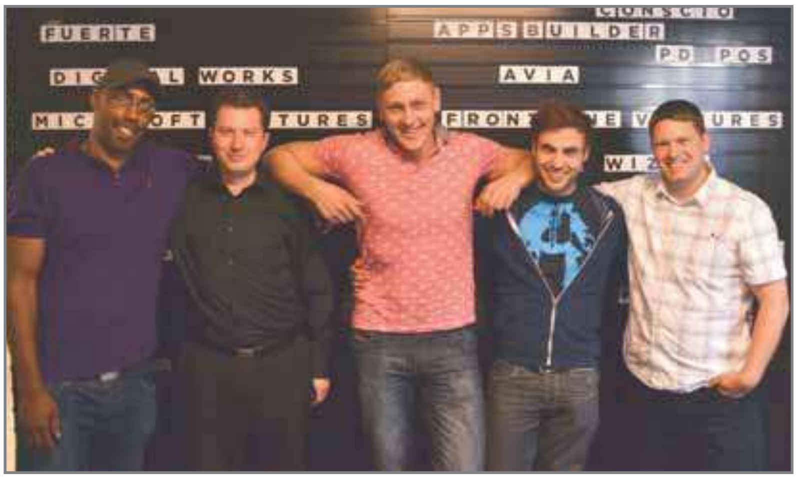
HOW IT WORKS 4:
Greenshoots

Microsoft has partnered with Creative England to offer up to 10 indie game studios a cash investment of up to £25,000 per studio to turn an original tablet or mobile game idea into a money-making application. Aimed at start-ups in eligible regions in England, the programme only requires studios to pay back the investment when they're making money from the game. Applications are closed for this intake but plans are already under way for a new programme in 2014.
www.greenshoots.creativeengland.co.uk

HOW IT WORKS 5:
AppCampus

To drive innovation and business opportunities in Finland's mobile ecosystem and across the world, Microsoft and Nokia have invested nine million Euros each into the AppCampus program. The newly established mobile application development program is based at Aalto University, Finland, and offers both support and awards of between €20,000 and €70,000 to teams in the UK and elsewhere.
www.appcampus.fi

CASE STUDY 5: GallantCloud



Being an indie is first and foremost about creativity. But for an indie to last, it must still be a business. Fortunately, Microsoft Ventures' Accelerator programme can help young teams be just that. One studio currently going through the 12-week Accelerator programme in London is GallantCloud, recently formed by five former Train2Game students and currently at work on an unnamed casual title. *"There are many, many ways in which the Microsoft Ventures UK Accelerator helped to form the GallantCloud team,"* offers the studio's artist Ben Cooper. *"Microsoft realised our 'newness' as a team and they really helped us to bond and figure out what role we played in the business."*

Halfway through the Accelerator at the time of writing, the GallantCloud team have learned in six weeks what unsupported studios can devote years to uncovering. *"I think that one of the most important aspects for me has been the use of the Central Working workspace* [in London]*,"* adds Cooper. *"It is the perfect environment for our young team where we are surrounded by brilliant people. By talking to these other start-up companies and diving into all of the events in the local – and not so local – area we have changed."*

According to Cooper, thanks to the Accelerator GallantCloud are no longer a team of students, but "a team of professional young gentlemen" that have a very clear aim, and, now, the means to accomplish it.

www.gallantcloud.com

INTERVIEW:

Andrew Webber

Andrew Webber is your go-to man if you're an indie looking for support from Microsoft. Here he explains why Microsoft is keen to work with start-ups and small teams.

Why is working with start-ups through programmes like BizSpark and the Ventures Accelerator so important to Microsoft?

Of course, Microsoft would like start-ups, whether they are game studios or other kinds of tech companies, to develop on and for Microsoft cloud or app platforms. But if that was our only reason, it would be incredibly self-serving, and the truth is we want to see a successful and vibrant start-up community in the UK doing new and exciting products and services, because that is good for everybody – the start-ups, the UK economy, and vendors like Microsoft.

And why should UK start-ups consider working with Microsoft? What's in it for them?

First of all, Microsoft itself is a massive opportunity for any start-up. We procure services with a multitude of different vendors, and we have seen examples where start-ups we work with actually become vendors to Microsoft. Next, Microsoft works with pretty much every single enterprise in the world, and we have referred start-ups to customers of Microsoft because we think their tech is interesting. The other advantage is that Microsoft truly is a cross-platform organisation, whether you're developing for mobile platforms, consoles, cloud or browser. If you want to work with a vendor that sits across all those platforms, Microsoft is the one. As Microsoft is a massively technology and engineering led organisation, we can provide a lot of technical expertise when we support a start-up.

And is there an example of an initiative from Microsoft that demonstrates all of that?

I think BizSpark is a great example of how Microsoft can help. It's coming up to its fifth year this month, so we'll be having a big celebration. On top of investment in kind, we organise networking events to introduce start-ups to clients of Microsoft and the investment community. That has nothing to do with developing on Microsoft stack, and everything to do with those start-ups being successful. Globally some 75,000 start-ups have gone through the BizSpark programme, so it has a huge impact. Right now in the UK we have about 3,000 BizSpark-registered start-ups, and about 4,000 that have graduated from the three-year programme and are still in business.

So in that way teams would also be joining a start-up community to share and learn with?

Completely. That's partly how the Accelerator programme is being constructed, to enable start-ups to learn from each other as well as Microsoft and the mentors we have. BizSpark is exactly the same, and we do broker introductions between start-ups as well as with enterprise clients.

What about the advantages and opportunities Windows 8 and Windows Phone 8 offer start-ups?

Windows Phone reached a milestone recently where it tipped over 13% share in the UK, phenomenal growth in such a short time. Yes, it's not quite the market share yet of iOS and Android but it is showing phenomenal growth with Nokia delivering an exciting range of smartphones, phablets and now a new Windows 8 tablet announced as well. Windows 8 has only been out since October last year, and already we are seeing games that have been downloaded a million times. So there are lots of good reasons start-ups should think about both Windows 8 and Windows Phone as part of a cross-platform strategy couple along with our Windows Azure Cloud platform.

Is there a typical kind of start-up that you'd encourage to get involved with the likes of BizSpark?

No, because we encourage almost any technology start-up to get involved who is developing a software product or service. With BizSpark, as long as you're in your first five years, are privately owned and you meet the revenue threshold of less than a million dollars a year, then you should talk to us.

And who should they contact?

That's simple, they should contact me at andrew@microsoft.com.

BUILD

THE LATEST TOOLS NEWS, TECH UPDATES & TUTORIALS

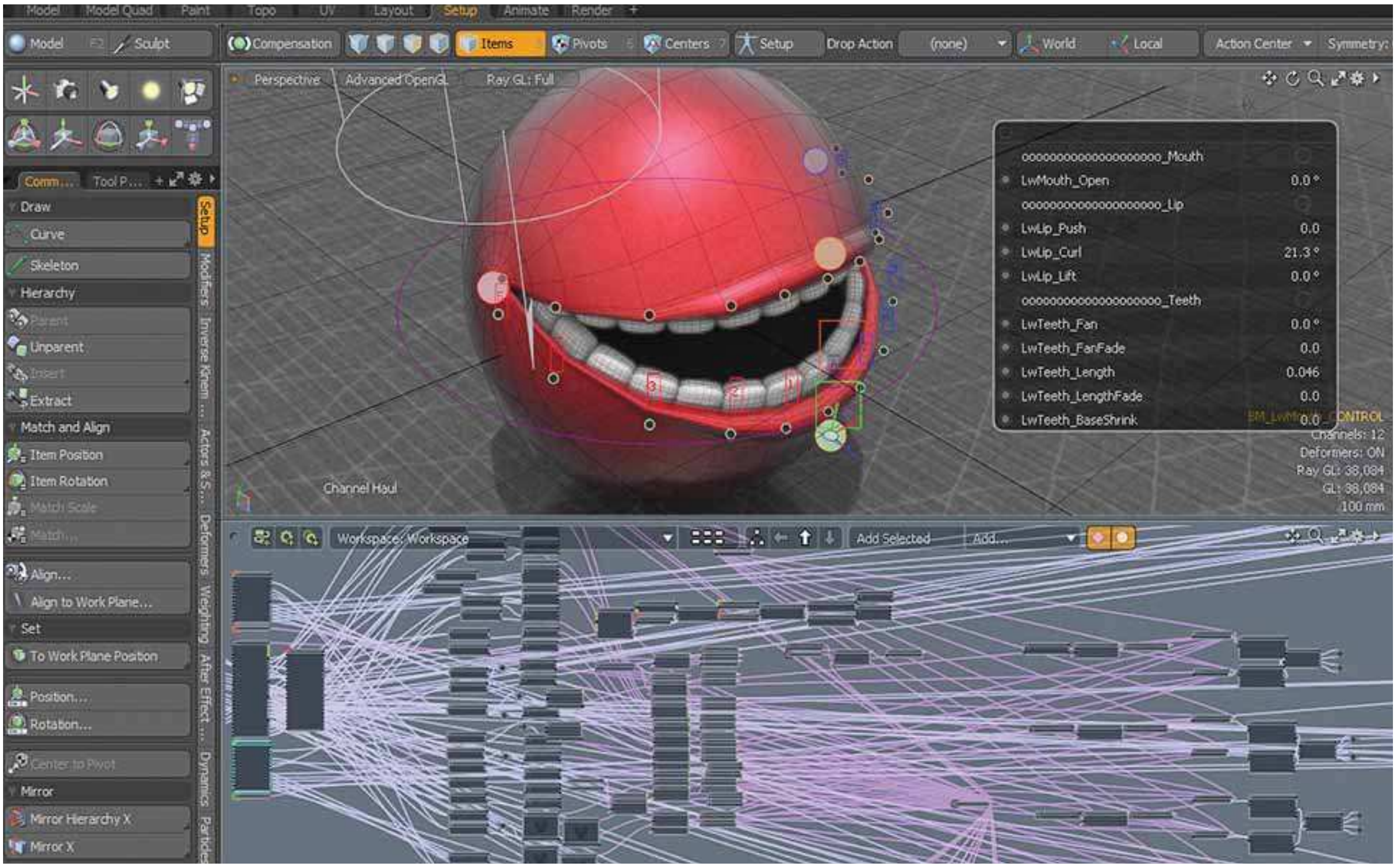
The origins of Pitbull Studio p50

Firing up animation

As a new era of consoles approaches, Develop investigates how developers and middleware companies plan to harness the powerful hardware on offer for the world of character animation, p38

Inside workstations and hardware p42

Sony's open source PhyreEngine p44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The next-gen step in character animation

With the PS4 and Xbox One almost upon us, **Craig Chapple** looks at what the new hardware can unlock for animators

The Foundry's modo tech (main image) is one of a number of tools bringing character animation to the masses and preparing developers for next-gen console development

DESPITE THE LONGEST console generation yet, with Microsoft's Xbox 360 launched as far back as 2005 – eight years ago – progress in the character animation space has still been steady, bordering on slow, in recent times.

Some advancements have come as devs got to grips with the ageing hardware, which can be seen over time in franchises such as the *Gears of War* and *Mass Effect* series, with each entry steadily upping the ante graphically.

Such improvements in character animation have arguably now peaked on the cusp of the next generation of consoles, with the likes of Naughty Dog's *The Last of Us*, Quantic Dream's *Beyond: Two Souls* and the artistically-styled *The Walking Dead* by Telltale Games showing just how far the sector has come the past eight years, and how important this space is to game narrative and player immersion.

The smoothness of these animations is critical. For players to feel immersed, they must believe in the world around them, and not be put off by strange facial animations or odd reactions to the physical world.

It's no wonder then, as we approach the launch of the PS4 and Xbox One this month, that a host of the world's biggest developers and publishers have invested in new state-of-the-art game engines, such as EA's Ignite and Frostbite 3 development platforms, Kojima's Fox Engine and Square Enix's Luminous engine, with player expectations in visuals and character animation set to jump alongside the huge leap in hardware specs.

A plethora of enhancements in character and facial animation have also been made in the third-party middleware space. Epic's Unreal Engine 4 features a new integrated toolset called Unreal Persona, built on top of the Blueprint visual scripting system, which offers blend spaces and state machines and also allows animators to create a playable character without the aid of a programmer.

Unity 4 meanwhile also includes character animation tool Mecanim, and version 4.3 will add BlendShapes, helping developers create realistic and emotional facial animations.

Mixamo's new free character creator Fuse allows developers to create new 3D models from scratch or select from an array of rigged 3D character models. The tech effectively acts as a 'free-to-play' character animation tool.

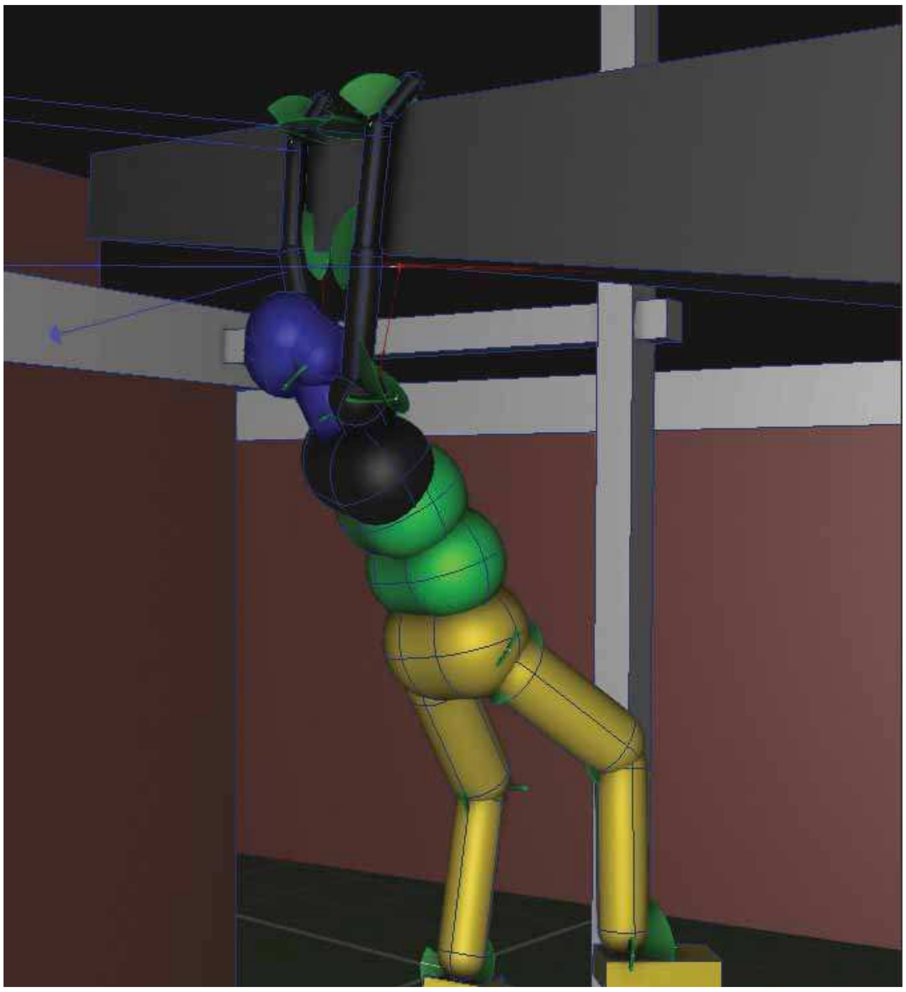
The company has also just launched Face Plus, a facial animation technology integrated into the Unity engine that allows developers to capture and apply facial animations onto a 3D character by using a webcam in real-time.

A BELIEVABLE PERFORMANCE

Mixamo CEO and co-founder Stefano Corazza says progress in character and facial animation has become a key part of game development, particularly in narrative-driven titles, as developers look to drive the aforementioned immersive experience.

"With storytelling becoming an increasingly important part of games, it is crucial for developers to deliver high quality character animations, including facial animation. Games like *The Last of Us*, *Tomb Raider*, *GTA V*, *Assassin's Creed III* and *Heavy Rain* are setting player expectations and gamers now pay even more attention to story, voice acting and animations. They look more and more for immersion in their experience," says Corazza.

Colin Urquhart, CEO of facial performance capture firm Dimensional Imaging, agrees



that the need to convey strong and emotional performances in many games is a driving force behind the character and facial animation sector, with demand increasing for such tech as developers continually raise the bar to create more film-like experiences.

"The demand for more engaging and emotive performances is driving the need for more realistic facial animation," he says. "We are also seeing much more use of 'digital doubles', with casting for likeness, than ever before. The use of head-mounted cameras to capture facial performance simultaneously with traditional body mo-cap is also increasing – and there is huge demand to improve the fidelity of capture from such devices."

Unity software engineer Pierre Paul Giroux says this increased use of performance capture to gather body motion, face motion and audio at the same time is one of the most important recent trends in animation. He says such a process has been incredibly expensive in the past and only affordable to large studios, and it wasn't until recently that more affordable solutions have begun to emerge.

"Performance capture greatly enhances character integration into virtual worlds. Actors can adjust performances based on direct visualisation into the game. There's no more loop time, between capture, or cleaning and integrating animations into the game engine," he explains.

SPIRALLING COSTS

But is this drive for complete performance capture and life-like character animation significantly driving up the costs of development? Achieving realism isn't cheap, and with modern triple-A budgets in excess of tens of millions of pounds, there is a danger that costs will spiral out of control in the next generation with its powerful new hardware.

NaturalMotion lead technical animator Simon Mack says there is an ongoing drive to increase character fidelity, and the quality of characters and their animations needs to once again keep pace with the new systems.

> ***"With storytelling more important, it is crucial for devs to deliver quality character animations."***
>
> Stefano Corazza, Mixamo

He believes interactions between characters and dynamic environments will become increasingly important.

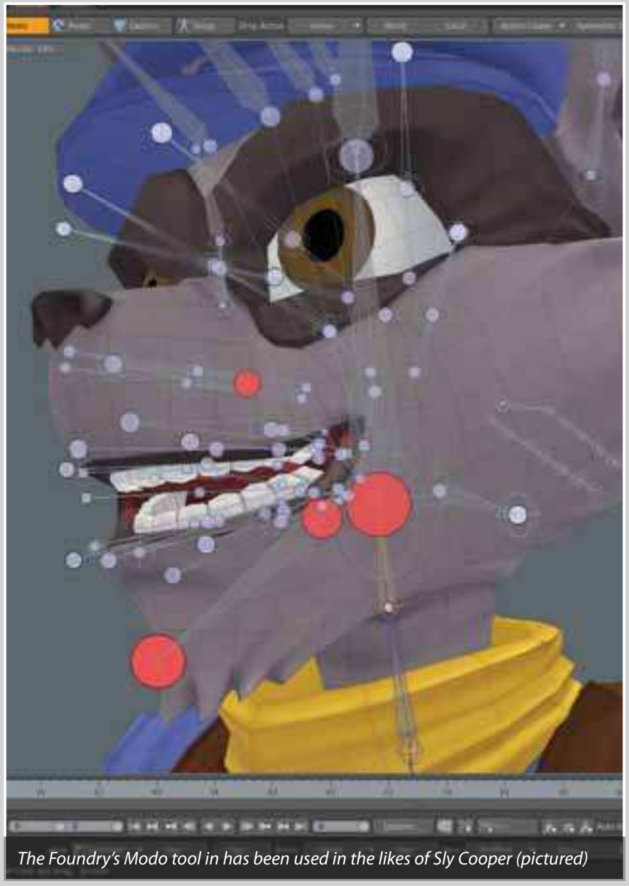
Mack warns however that with such an increase in power and the new capabilities available to developers, keeping control of the budget and managing time is one of the key challenges that lies ahead.

"It may not sound terribly exciting, but one of the biggest issues is managing development time and cost, particularly as studios re-work their engines for next-gen. There's just an awful lot to do. Naturally, we see middleware as a key solution. Used properly, it allows teams to focus on building the things that makes their game unique rather than reinventing the wheel."

Urquhart agrees that costs for animation are continuing to rise, but notes that as costs in areas such as facial animation rise,

▶

CHARACTER ANIMATIONS FOR INDIES



The Foundry's Modo tool in has been used in the likes of Sly Cooper (pictured)

THE NEXT GENERATION of consoles may now be upon us, but the increase in hardware specs doesn't mean the platforms are solely the domain of triple-A studios on the cutting edge of technology. In fact, Sony, Microsoft and Nntendo have all been pushing indie developer support.

A number of middleware firms, including Epic, Mixamo, Unity and The Foundry have also been targeting indies in the character animation space to bring realistic character movements and animations to developers of all sizes.

"The tools for character animation have been cheap enough for a while," says The Foundry's president of the Americas Brad Peebler. "The real gating factor is productivity. Most character animation systems require a pipeline or artists. Modo provides a streamlined environment where a single artist can go from concept to final creation. Projects like Matt Burniston's short film 'The Mega Plush', which was produced entirely in Modo, are great examples of this."

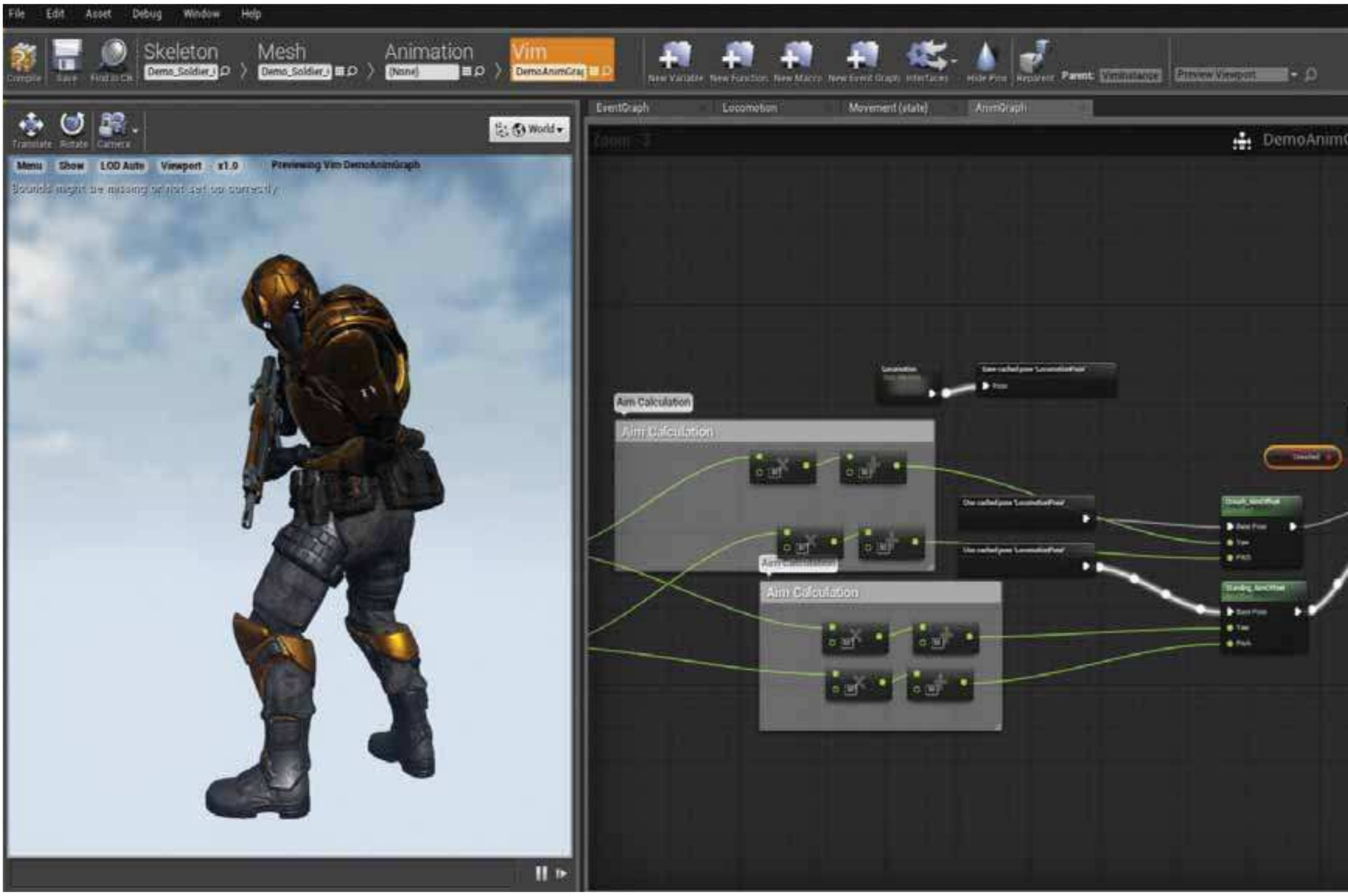
And despite Unreal Engine 4 perhaps being touted as the top-end scale of triple-A game development on next-gen consoles, Epic lead technical animator Jeremy Ernst says the firm also provides licensees with Maya animation and rigging tools, such as those used in the developer's own upcoming title *Fortnite*.

This, combined with other built-in animation tools in UE4, means all parts of character animation can be done by the animator, from character creation and rigging to animation and implementation, without the need for a modeller to provide time to test an idea or a programmer to implement it.

Mixamo is also working to provide easier-to-use character animation tools for developers, as well as offering a tiered subscription service to its array of ready-made animations, and company CEO Stefano Corazza says it is looking to provide an efficient way for indies to create character art on a tight budget through its own suite of tools and services, such as its free 3D character creator Fuse.

"Our mission is precisely about making high quality 3D character art within reach of independent developers," he says. "Creative and innovative concepts are not reserved to the largest studios with the biggest budgets.

"There is a world of developers with amazing ideas out there, and we want to enable them to make them happen in an affordable and efficient way, without requiring armies of animators, modellers and riggers."



Epic's UE4 houses its new animation system Persona (main image). Above (from top-to bottom): The Foundry's Brad Peebler, Dimensional Imaging's Colin Urquhart and Epic's Jeremy Ernst

▶ the quality of performance must also increase to match advancements in graphical realism and fidelity.

"One of the key challenges the industry is facing is the spiralling cost of continually improving the quality of facial animation. How can studios create hours of facial animation at ever-higher levels of detail, quality and realism within reasonable budgets?" says Urquhart.

"I think the answer has to be to use technology like Dimensional Imaging's to accurately capture the performance from real life talent. However, this then introduces the challenge that as the realism and fidelity of the animation improves, so the quality of the performance must also improve to match. I see the secondary challenge of obtaining good acting performances becoming increasingly important to the industry."

ITERATING ON ANIMATION

Some of the more obvious challenges include difficulties in animating and rigging, which Brad Peebler, president of the Americas for Modo firm The Foundry, says suffers from a poor feedback process.

The perhaps contradictory nature of animating and the technical focus of rigging creates what Peebler calls a highly inefficient and oftentimes painfully slow process, one which can require a few minutes to judge each model and result meaningfully.

"Rigging is hard. Animation is hard. That's the real throttle on the animation market and process," he says.

"Both of these areas suffer from poor feedback. Unlike a model where you can see the shape taking form in a millisecond, rigging and animation still requires seconds and minutes to see a result in a meaningful way. Since the animators tend to be less technically focused and rigging is incredibly technical, there is an implicit feedback loop required yet the linear nature of these two processes makes it highly inefficient, painful and downright punishing."

> ***"Rigging is hard. Animation is hard. That's the real throttle on the animation market and process."***
>
> Brad Peebler, The Foundry

Unity's Giroux adds: "Lowering the iteration time between animation authoring – mo-cap or other – and visualisation in-game is an important challenge," he says.

"Also, game developers are animating more and more in-game, whether we're talking about additional characters or simpler objects, which increases the complexity of the data. That means it's important to have smarter workflows that allow animators to arrange and assemble animations efficiently with high-level tools. While neither of these challenges are new, the huge increase in the amount of data introduced with next-gen consoles – which will translate into more animation – will make them more important than ever."

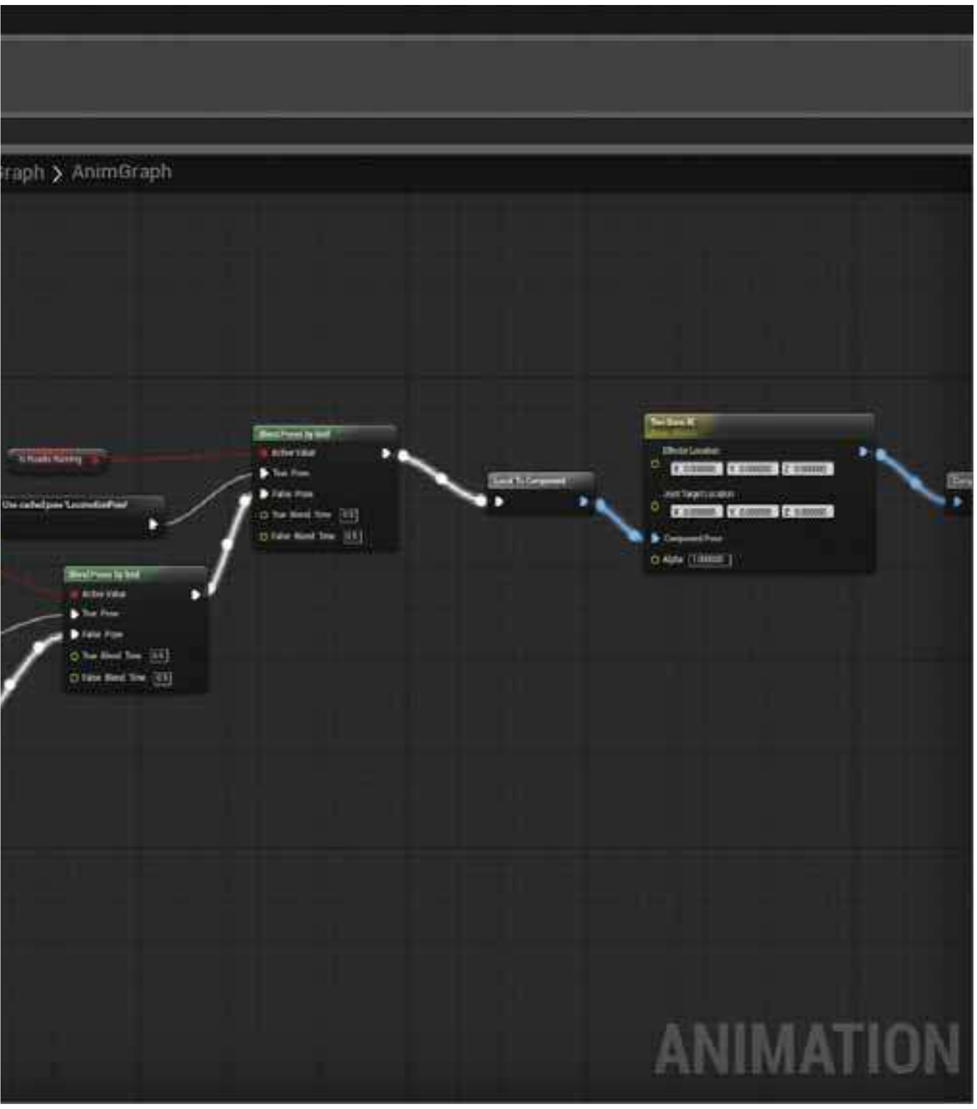
GETTING PHYSICAL

Another challenge facing developers is ensuring realistic interactions between the game's characters and the physical world they inhabit. While some advancements have been made in this area, which can be seen in titles such as Naughty Dog's *Uncharted* and *The Last of Us*, there are still difficulties ensuring characters correctly respond to the world around them when the user is in control.

The issue of characters skirting across different terrain without being realistically grounded or odd animations, such as climbing stairs, are just examples of the difficulties facing developers in this area, as well as ensuring NPCs react believably to objects placed in their way.

Mack says NaturalMotion has tried to solve this with its own runtime character animation and graphical authoring environment Morpheme, which it recently launched with simulation tech Euphoria. This, he hopes, will help developers to push character physics to the next level.

"The interaction of characters with a physically simulated environment is a problem we've been working on for over a decade," states Mack. "I believe that Euphoria has long provided the most advanced and flexible solution for dynamic character



animation. The major problem has been the level of expertise required in order to be able to integrate and use it to best effect. That's why so much of our focus has been on simplifying the authoring experience. Now that we've launched Morpheme with Euphoria, we hope that we'll see developers using our tools to push character physics further than ever before.

"Another key area is the interaction between AI planning and animation that's required to have characters respond believably to their surroundings. We have been working hard on tools to assist with this, and Morpheme includes our Prediction Model system. This can provide a game's AI code with the information it needs about animation capabilities to make smart control decisions at runtime."

ANIMATION ON THE MOVE

Away from consoles, the booming mobile sector offers its own unique challenges in character animation. While the tech behind smartphones and tablets has improved rapidly, it has arguably still not yet surpassed the current generation consoles, and appears a long way off exceeding next-gen consoles.

Epic lead technical animator Jeremy Ernst says the challenges facing devs creating games for cutting edge mobile devices is similar to those faced on the PS2 and Xbox. He highlights potential performance issues with real-time physics and cloth for in-game characters that can prove a limiting factor for many titles.

"Bone count and influences per vertex are still limiting factors, though even the bone count was pushed quite far on *Infinity Blade*, similar to those we used in *Gears of War 3*," he explains. "Real-time physics and cloth for characters is still a performance burden as well. These are limitations generally associated with the hardware, though."

NaturalMotion's Mack asserts however that, from a technical standpoint, mobile is not far away from the current generation of consoles. But he warns that many mobile developers are inexperienced in creating 3D characters and animations, and questions whether, at least for now, these studios are ready to take advantage of better hardware.

> ***"With the rise in quality, many of the shortcuts used in games now may not hold up to the fidelity required."***
>
> Simon Mack, NaturalMotion

He also believes in the past mobile developers have stayed away from many external tools, but says as the hardware gets more powerful, developers may open up to third-party offerings and create more ambitious 3D titles.

"From a technical point of view, mobile is not so different to console now. Obviously the complexity and size of assets has to be managed, but at NaturalMotion Games we're using Morpheme and Euphoria to great effect on mobile," he says.

"A bigger issue in mobile is that many developers have little or no experience building 3D games and 3D characters. There's a lot to learn, and development budgets have to accommodate the extra work involved. Mobile studios have also historically been reluctant to license middleware other than complete engine solutions.

"As the complexity of mobile games increases and budgets rise to match, we may see this change and open up greater possibilities for animation on mobile."

THE NEXT-GEN STEP

As hardware across the board gets more powerful, and the PS4 and Xbox One launch later this month, the future of character animation looks at both times promising and extremely challenging.

As more games take a narrative-driven approach and expectations rise, so will the costs of character animation as developers strive to create believable characters.

Dimensional Imaging's Urquhart claims the next-gen jump could require game assets and performances on par with that in TV and film, with more complex rigs created for increasingly realistic facial animation.

"The levels of quality and realism that could previously only be achieved with offline rendering will be able to be achieved in real-time on next-gen consoles," he says.

"I therefore think that we are truly entering an era of convergence, where the quality of both the assets and performances required in games will be much more on a par with those required for television and movies. In terms of facial animation, the additional resources available in new consoles and engines will allow much more complex rigs that will be able to deliver more realistic animation and convincing performances than ever before. Traditional rig based facial animation will also begin to be augmented or even replaced by vertex cache driven animation, animated detail maps and animated textures."

On the subject of facial animation, Mixamo's Corazza adds: "The next step for character animation, is going to be about facial animation first and foremost. Cutscenes showing static, lifeless characters without facial expressions or slapping a mask or helmet on characters to avoid dealing with facial animation will not be accepted by players for much longer as they are getting more and more familiar with great facial animations."

Mack also says that next-gen games will be required to push the boundaries of physics simulation further than ever before, and characters will need to respond realistically and intelligently if this new wave of titles are to match up to the hardware and high consumer expectations.

"Characters are going to have to be able to respond intelligently to these dynamic environments," he explains.

"Motion synthesis and other procedural and adaptive animation technologies are going to be increasingly important. The rise in graphical quality will also put a spotlight on animation quality as a whole, and many of the shortcuts used in games now may not hold up to the fidelity required." ■

Above: Unity Software engineer Pierre Paul Giroux (top), Mixamo CEO Stefano Corazza and NaturalMotion CTO Simon Mack

Power towers

Hardware manufacturers are starting to wake up to the fact that developers don't want a one-size-fits-all workstation. **Aaron Lee** traces the latest hardware available to upgrade your games development muscle

BUYING A WORKSTATION is, by its nature, a proposition that prompts careful consideration. No doubt you will have a set of performance requirements in mind and strict budget.

Perhaps your kit is struggling to run the new game engine you recently forked out for? Or maybe you are bringing new staff on board and require hardware that can be easily tuned to suit their individual needs?

These problems are exactly what new, games development-focused hardware lines from HP and Lenovo aim to solve.

And if you're the sort who has pushed your hardware to its limits, replacing the fan, upgrading the GPU and generally giving it more tune ups than your parents' 1980s Volvo, you'll want to know what's on offer should your tower not make it through another winter.

ThinkStation
lenovo
ThinkStation

LENOVO: SMART THINKING

THE MARKET FOR workstations has evolved from the days when companies offered a one-size-fits-all box. Nowadays, the hardware comes in a variety of form factors, while still pursing data-crunching muscle.

Lenovo's software development ThinkStation series aims to provide reliable and rock solid performance.

Ashley Rolfe, workstation technologist at Lenovo, tells *Develop*: "Before going on sale, all Lenovo ThinkStations go through a rigorous period of testing and certification. We don't just test each component; we test all components together as a unified solution, to ensure the stability of all our solutions.

"In addition, each ThinkStation goes through an additional round of certification by the various independent software vendors, such as Adobe, to make sure our hardware is fully compatible with their software to certify the best possible results.

"We also use error-correcting code memory, which might not be typically used in a custom setup as it can detect and correct data from corruption, vital in environments where the integrity of data is everything."

Lenovo's workstations come in two main flavours: single-processor, such as the ThinkStation S30 and newly launched E32, and dual-processor, such as the D30 and C30.

The recently launched E32 workstation is based on Intel's Haswell architecture and slimmer design makes it suitable for studios that are tight on budget and on space. Rolfe says studios whether a studio invests buys one today or in 12 months time, it will be identical, helping them to simplify "management of the estate".

Expect to pay in the region of £800 (including VAT) for Lenovo's ThinkStation series hardware.
www.lenovo.com

HP: TOOLING UP

UNVEILED AT GDC, HP's Z series workstations have been engineered especially for games developers, and have the likes of Epic Games and Autodesk to back them up.

Sold in conjunction with Alt Systems, HP provides its Game Developer Edition for Autodesk and Unreal Engine users on three platforms: the HP Z1, the HP Z820 and Z620. Alt Systems will work with you to configure systems to your needs, as well as grant any technical support you require to get the best performance out of the system.

Ray Gilmartin, worldwide media and entertainment segment marketing manager at HP, says:

"HP's highly tuned workstations give customers a personal experience – much like having an engineer in the box – with HP's special Performance Advisor software that automatically tunes the workstation, finding and installing the proper drivers.

"Each HP Workstation is passed through HP's quality assurance and testing process, which goes well beyond PC industry testing requirements."

Furthermore, HP's workstations come with pre-loaded with software that allow you and your team to collaborate on projects remotely, all in sync and with next to no loss in performance. Gilmartin says HP's Z workstations alleviate the concerns that your hardware won't stand up to the many demands placed on the system on a daily basis.

"HP offers more choices than any other vendor, with the broadest scope of options and the most specialised configurations, ranging from any graphics card, multiple display configurations, to any OS a customer selects."

Expect to pay in the region of £1,525 (including VAT) for HP's Z series workstations for games.
www.hp.com

START-UPS: WHAT TO KEEP IN MIND WHEN BUYING A WORKSTATION

BUY AT THE START OF A LIFECYCLE
"The best advice when choosing a workstation is to buy at the beginning of a CPU architecture lifecycle," says Lenovo's Ashley Rolfe. "That way as the studio expands you can add additional workstations when needed, without causing complications for the IT team."

CHECK FOR SUPPORT
The vendors make convincing arguments about software compatibility and whisper-quiet fans and so on. But when you find yourself in a tangle, reliable hardware support is what counts. Speak to fellow developers about vendor support before you make up your mind about who to buy from.

DON'T FORGET YOUR END USER
When buying a set of workstations, Rolfe also recommends that you include at least one entry-level system too, as this will allow you to test games on less powerful machines, which are more aligned to what consumers will use.

BE FLEXIBLE
Your budget may limit you to a single platform, but scalability is where Ovum's Adrian Drury argues that Mac gives you an edge: "Depreciation on a Mac is likely to be slower than a custom gaming workstation, so for a start-up studio that may have to scale-up and scale-down the number of workstations, that's another good reason to look at a Mac environment."

SHOP AROUND
Workstations for HP, Lenovo and other manufacturers are sold through resellers. You can find a list of nearby sellers via the manufacturer's website. May of the resellers do not list prices on their websites, so it is worth searching online for the lowest price comparisons or giving sellers a call directly to see if you can strike a deal.

Top-to-bottom: Adrian Drury of Ovum, Ashley Rolfe of Lenovo and Ray Gilmartin of HP

APPLE: THE MAC FACTOR

THE POPULARITY OF mobile games has changed opinions on Apple, and with it attitudes towards gaming at the hardware maker itself.

Many popular game engines and SDKs now support Mac, and makers of software tools, such as Hansoft, have gradually adapted their software to ensure it is available on Apple computers, which have been in demand from iOS and indie devs.

"Gaming is increasingly critical to Apple," says Adrian Drury, lead analyst at Ovum, who specialises in IT, media and telecoms. "It is central to the iOS ecosystem and with the introduction of 64-bit computing and OpenCL to the just launched iPhone 5S, the boundary between a console and a smartphone gets ever more blurred."

Apple updated its flagship iMac in September. The super-thin 21.5 and 27-inch computers (*above*) now come with the latest Nvidia GPUs and the option of adding PCIe-based SSDs for rapid data transfer rates.

Also on horizon is the new Mac Pro (*right*), which has undergone a radical redesign. At just 25.1 centimetres tall and 16.8 centimetres wide, this circular silo of black gloss could be mistaken for a designer waste bin. Equipped with dual GPUs, Flash storage by default and up to 12 cores with the highest spec configuration, the Mac Pro will be a formidable machine, and is due this December.

As Mac's have become a standard feature in enterprise, Drury says support for OS X has become effectively standard. And cost-wise, he says Macs represent an affordable option for games developers: "The price differential between the iMac products and workstations sold as games developer-specific is not so wide. And, for the right users, Mac's will generate less support calls or encourage self support."

The new iMac starts from £1,149 (including VAT).

www.apple.com/uk

Opening Phyre

As the PS4 readies for release, a pivotal part of the PlayStation SDK is celebrating ten years of powering games. **Will Freeman** meets two of the creators of PhyreEngine, the cross-platform tech provided with full source code

Richard Forster (above left) and Jason Doig (right), of SCEE R&D, helped shape Sony's open source games engine that started with graphics and now tackles much more

PhyreEngine is turning ten, and it's been the same core team involved since the start. As part of that team, how did PhyreEngine come about?

Jason Doig, Senior R&D Manager, SCEE: Initially, it was just three of us. Richard and I have been part of the team since the beginning of PhyreEngine, and in fact since the beginning of having a proper research arm within SCEE. Traditionally our research groups have been based in Japan or America, and until we set up there was only really a support team in Europe. We never had that full research arm.

Then, around the beginning of the PS3's development cycle it was decided we should have a research group, and it was my job to head that up, and Richard was the first person to join me.

Richard Forster, Senior Engineer, SCEE: Yes. Up until then I was developer support, and then I moved across.

Doig: So I'd hijacked him really. The other person was a guy named Michi Eder, who is still with us, so the original team is still here. He came to us from SCEI. He's actually Austrian, but had ended up in Japan, and was coming back to Europe, so he joined us and formed the original SCEE R&D.

We immediately went and had various meetings to discuss what the PS3 was going to be, and very early on in the development cycle of the console people were discussing the software needs and where we should take it. It was said that a graphics engine was needed, so we said 'yes, we can do that' immediately. That was 2003, and that's where the project started.

So what inspired those higher up at SCEI that a team of three in London were the people to produce the PS3's graphics engine?

Doig: There's two things there. It wasn't necessarily deliberate that we got that piece of work. There was a research arm in the US that had done work for the PS2, and that had produced the research behind the EyeToy, which was eventually developed as a product here in London. So Sony's research was always moving and taking place in different places.

> ***"Our own list of quite weird rules for how PhyreEngine should be was where things like it being cross-platform came from."***
>
> Richard Forster, SCEE

But it was also a matter of dividing up the work that needed doing across the world, and at the point we formed – maybe a little late to the party – a lot of the work had already been picked off, but nobody had really wanted to tackle the graphics engine. It was quite a big bit of work, looking back.

But I'd had quite a lot of background in graphics, and I'd worked on the PlayStation 2 Performance Analyser with SCEI, so I'd gone over to Japan to do that. They knew that we had the expertise here in London, so they were quite happy we were keen to take on the graphics engine.

Over the last ten years, what has remained the same about PhyreEngine? What are its consistent, defining qualities?

Forster: We set down our own list of quite weird rules that we gave to SCEI for how PhyreEngine should be. That was at the very start, and that was where things like it being cross-platform and open source came from. That starting philosophy really shaped the engine.

Doig: We had very firm ideas about the engine right back then, and I'd done some engine tech stuff previously, right back when first-party was still called Psygnosis, so we'd already done cross-platform PC stuff and things for other consoles. And so when we were setting out that philosophy for a graphics engine to be released to developers, I said that it had to be cross-platform. Up until that point Sony's SDKs and such had naturally not been cross-platform, but with this engine, I knew nobody would adopt it unless it was just that.

But why is that? Why would proprietary SCE tech be cross-platform?

Doig: Well, we can write a really great graphics engine that isn't cross-platform, but people won't adopt it, because they need

Created using the PhyreEngine, these tech demos offer a glimpse at its capabilities, which range from displaying dozens of models on screen (top left), to handling varying hues of real-time lighting (below left)

that flexibility to use it on other platforms before they will really feel comfortable using it. That was really important to us right from the start.

The other thing we set in place that early on was a real focus on support. We knew that would be very key for something like an engine.

Forster: And I think over the ten years we've achieved a lot there. The feedback we've had there has always been good, and we've always tried to be as helpful as possible with everything we do with Phyre. And that remains really important to us today.

That must be especially pressing with new technology coming out every year.
Doig: Yes, that's right. This kind of work is never a static thing, and even our oldest users are still doing new things with PhyreEngine, meaning we're always busy adding things.

On the subject of industry change, have you had to alter PhyreEngine in response to the rise of the small studio?
Doig: It's interesting. We really saw that make an impact at the change from Phyre 2 to Phyre 3. Before then it was always a fairly familiar product, and somebody who knew the first version would easily understand Phyre 2. Phyre 3 was quite a big change, and that was a deliberate response to the arrival of Vita. Up until that point we'd only really considered PS3, and we'd done a PC version with cross-platform, but we'd not until that point considered a platform that doesn't have multi-core architecture, such as the CPU of the PS3, and lots of SPU optimisations.

That meant going to something that was a mobile gaming platform, while also considering that a new home console was on its way that was going to be truly very powerful, we needed to design an engine that was a great deal more scalable, so that prompted a lot of changes.

> ***"This kind of work is never a static thing, and even now our oldest users are still doing new things with PhyreEngine."***
>
> Jason Doig, SCEE

Forster: Certainly, we had a great grounding in PS3, but that left us with a difficult challenge for PhyreEngine 3.

Doig: But we knew that if we were going to have to re-architect some of the core stuff, we should also take the time to respond to some of the bigger developer requests we had had over the years. When developers asked for something smaller, that was relatively easy to do, but when they wanted a major change it was very hard to do without breaking things for other developers. But with Phyre 3, in going back to the drawing board and looking at what everyone was wanting from the engine, we had a real opportunity.

The main thing there was the shift from it being a graphics engine to being a games engine. We had to incorporate more tools and components and change the focus a little bit, and that was the point we saw the engine's appeal broaden. But it wasn't honestly a deliberate attempt to appeal to more indies back then; we were just trying to appeal to the developers we already had on board. It so happened that there was a bit of an overlap. Those kinds of studios were our core market anyway, and we'd been changing the engine to suit them. Studios like Thatgamecompany were the kinds of teams using PhyreEngine.

How is PhyreEngine distinct from other parallel middleware offerings?
Doig: That's a tricky one, because we're not really a traditional middleware with parallels out there. If we were trying to make PhyreEngine a commercial product, we would have probably done things differently, but we don't have to be that. The fact that we are part of an SDK and part of a bigger platform actually shapes what we are.

Our focus, however, is offering a solid, technical platform. We're not providing a complete solution and we're not trying to. Traditional middleware tends to be, if not complete, something with a large depth of features. What we try to do is provide something with breadth; a good solid foundation for whatever game you want to do.

With PhyreEngine we also expect developers to be doing a certain amount of building their own tech on top of that, rather than getting straight in there and making it. That also plays into the kind of game developer we attract, with Thatgamecompany using us as a framework to build on. An engine off-the-shelf may be more complete in a way, but by the same turn it can be more restrictive.

Forster: In fact, John Edwards [Thatgamecompany] spoke at GDC a year or two ago, and compared our engine with other middleware platforms. He told us PhyreEngine got him on the platform, while other tools told him how to make his game.

Doig: So in that way we're really a skeleton. But where we have strength and depth is the technical features on our platform. So, for example, if you want to use a particular feature of PS3 or Vita, we'll have a really good solid implementation of, well, the likes of graphics rendering. Our strength is supporting our platforms.

So how involved in the development of the PS4 has the PhyreEngine team been?
Doig: We've very much been involved. Obviously the main focus is on the development community, and their games. But certainly with Sony hardware, and Vita especially, we were involved in the very early days. With Vita we were on board in very confidential meetings, as a two-way thing really, so we can feedback on what we need, and for us to get information to feed back into the design on our engine, as we can't wait until the platform comes out. And it's similar with PS4, and with PS3 really. ■
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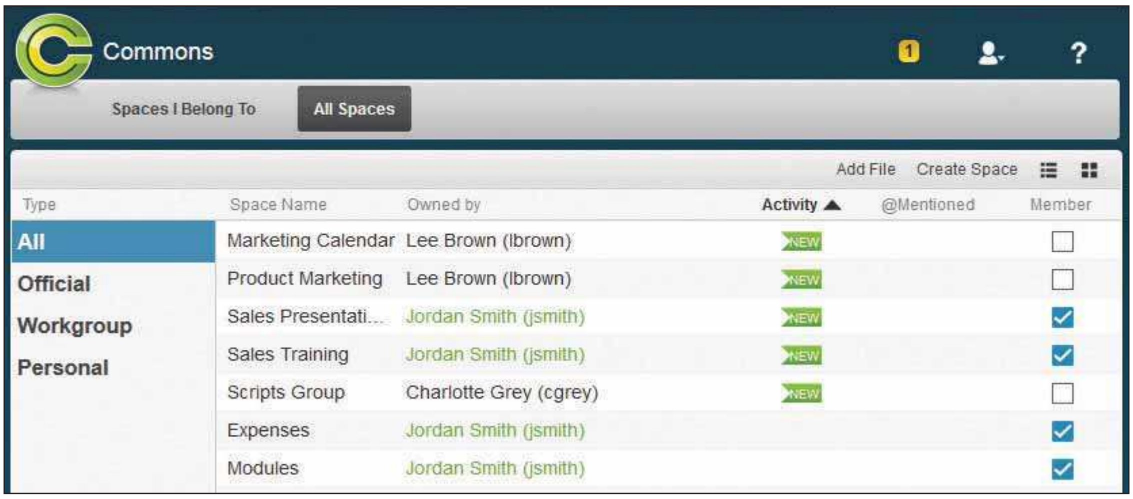
KEY RELEASE

Will Freeman considers Perforce's free-to-use Commons Cloud platform

What is it? A cloud-based, free-to-use version management platform for teams of up to 20, aimed at staff of all skill levels
Company: Perforce
www.commons.perforce.net



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Official	Product Marketing	Lee Brown (lbrown)	NEW		☐
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Personal	Sales Training	Jordan Smith (jsmith)	NEW		☑
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	Expenses	Jordan Smith (jsmith)			☑
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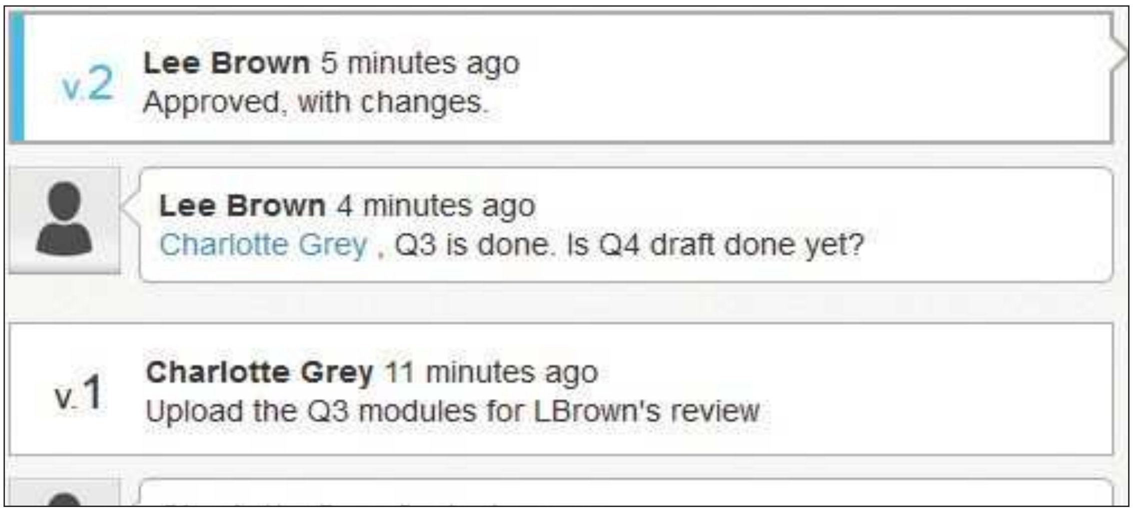

v.2 **Lee Brown** 5 minutes ago
Approved, with changes.

Lee Brown 4 minutes ago
Charlotte Grey , Q3 is done. Is Q4 draft done yet?

v.1 **Charlotte Grey** 11 minutes ago
Upload the Q3 modules for LBrown's review

THE DEMOCRATISATION OF games middleware has been underway for several years, but in 2013 a new chapter in the trend has opened. More specialised, intricate and previously high-end tools and tech are now being reworked for the masses, from the game artist to the layman.

From Havok Physics to Autodesk's Maya, remarkably powerful middleware is making its way to start-ups, small studios and indies. And now version management powerhouse Perforce has joined the clique of tech companies delivering an established, dedicated product in new ways for a considerably broader audience.

Commons Cloud is Perforce's latest product. It's free-to-use, and introduces a collaboration solution accessible online by remote or local teams. The platform promises to deliver the likes of file management and merge and compare capabilities to studios of every experience level, enabling concurrent editing capability without conflict for those in and outside of the games industry.

Commons Cloud in fact grew out of Perforce's recently released Commons offering, which welcomed non-technical staff such as project managers and artists to the fold with an on-premise technology. Commons Cloud takes that one stage further, delivering Perforce's solution in a form that is significantly more accessible.

"This introduces a cloud version of Commons," clarifies Perforce director of corporate marketing Bob Dever. "We've done that for a number of reasons. Largely, we really see that there is a need for the same level of collaboration we've always offered to bigger studios, just in everyday use. So this is something anybody can set up and use, and what it is really about is stopping anybody getting caught up in editing the wrong version of a file, so they can work in parallel on even the simple things like artwork, Word documents and PowerPoint files. They are benefits for the common user, if you will."

A SOCIAL VERSION

In essence, Perforce has taken a lead from the familiar design, mechanics and UX of contemporary social applications, and used the model as a method for delivering and sharing the outfit's long-established methods for version management. Teams of up to 20 can use Commons Cloud to work in unison on files without conflicts or time wasted editing the wrong file, all the while building a traceable, permanent record of changes.

In a contemporary studio, and in particular with start-ups and small teams where the creative process can include those without technical nous, or even staff in technological roles who may also be embracing the likes of human resources or PR, the platform could prove hugely useful.

And as Dhruv Gupta, Perforce director of product marketing explains, Commons Cloud could even serve as an introduction to version management for teams that hope to grow to the size and scale of studios that depend on the fully-fledged Perforce software offering.

"It absolutely can let people try version management and the capabilities of Perforce, and can definitely serve as an on-ramp in that way," he explains. "If you are using Commons Cloud then you can always talk to us and maybe go hosted or look at alternative Perforce solutions."

> ***"We really see that there is a need for the same level of collaboration we've always offered to bigger studios."***
>
> Bob Dever, Perforce

Files dropped into Commons Cloud can be shared through URLs – negating the error-prone world of email distribution – and as a given new revision is pushed, any user with access to the related URL will be linked to the most up-to-date version of the file.

"It lets your team avoid the problem of going through versions, one, two, three, 'final', 'final final', 'final version 3' and so on," offers Gupta. "And if you are working on legal or contract documents at your studio, it maintains a very robust history of changes that you just don't get from the likes of word editors' track changes modes."

Indeed, in a world where IP can serve as a studio's core currency, and legal disputes can arise, being able to prove the date and progress of the creative process could serve to be immeasurably valuable for a studio keen to protect its assets.

CLOUD AND CLEAR

Commons Cloud's core function, however, remains a simpler one. As the work contemporary studios are tackling changes, right down to the smallest teams where any staff member may juggle many job titles, and the line between tech-focused and non-technological roles blurs, Commons Cloud has strived to move file management from the realm of programmers and the code-savvy to the everyman.

"Cloud Commons is built with versioning issues in mind, and is explicitly meant to tackle those problems," concludes Dever. "It is not meant to replace a file sharing service, and in fact serves to compliment file sharing very well. Versioning issues that kill time and productivity are something we see everywhere, and Commons Cloud can stop those problems happening." ■

Perforce's Bob Dever (top) and Dhruv Gupta (bottom) say the Commons Cloud can introduce new users to version management

UNREAL DIARIES

Giant Spacekat's Brianna Wu opens up about her team breaking the mould on mobile with Unreal Engine 3

Revolution 60 is the debut game from iOS studio Giant Spacekat. It's made with UDK, the free edition of Unreal Engine 3

A FEW YEARS ago, Brianna Wu was considering her future as a mobile developer, contemplating the crowded 2D landscape.

"I'd done a lot of iOS development work, and was looking to start my own games company. My art background was in 2D, and I was very worried about competing in an endless sea of 2D sprites. Then I saw the Epic Citadel demo, and I immediately knew I was looking at the next 20 years of mobile gaming," declares Wu.

She and Giant Spacekat co-founder Amanda Warner dropped their game plan for an overhead tactics game, and began dreaming about how they could push cinematic experiences on mobile using Unreal Engine 3 instead. They conceived the original, highly narrative world of *Revolution 60*, downloaded the Unreal Development Kit, and never looked back.

A US team of four, Giant Spacekat is one of the only all-female development houses in the industry, and the team doesn't shy away from ambition. Media have described their action-filled, interactive storyline as '*Heavy Rain* meets *Mass Effect*', and they've embraced a heavy workload on the animation side in order to achieve the desired aesthetic style for the all-girl cast.

Wu says: "As a small studio, we have to really choose where we invest our resources. We were much more interested in telling a story than building an engine, so we asked ourselves who had the product that would get out of the way, and let us do the work we loved. Unreal was the obvious choice.

"I have to admit, I was very intimidated by Unreal at first. This is everyone on my team's first game to ship, but it's proven to be very easy to learn. There have been so many games developed with this engine that it's easy to find answers when we need them.

"I'm constantly amazed by how much the toolset encourages iteration. We'll sometimes assemble a scene, but it doesn't quite hit the tone we want. So, we'll tweak lighting or sound, or we'll polish an actor's animation and plug it back in. It's an extremely agile development environment.

"We also appreciate the vast array of materials and particles included in UDK. Often, I'll wonder how Epic managed to do a material or an effect on mobile. What's awesome is I can just open up one of their effects and take it apart until I understand it. Then I can create something that's my own work."

STORYTELLING REVOLUTION

When it comes to interactive storytelling, Wu says Unreal Matinee is the most mature toolset available: "The sophistication with implementing animation sets, controlling cameras, triggering events – it's unquestionably the best. What really appeals to us is not worrying about exact GPUs, tablet specs, memory, garbage collection, or trying to support new Apple devices. Unreal takes care of all that."

Wu emphasises how integral Unreal Matinee and Unreal Kismet are for her team: "It is literally at the heart of everything we do on *Rev 60*. Using the visual scripting, we're able to compile incredibly complex scenes with dialogue trees, action events you can pass or fail, and even slow down battle events to *Matrix*-style bullet time. Programmers can create custom Kismet nodes, seamlessly adding things mid-scene, and we're even able to have beautiful lighting follow the characters around within Matinee nodes.

"My animation team appreciates that we're able to animate the characters within Maya, and simply export it into Unreal with FBX. We were worried about the pipeline, but it couldn't be easier. A director assembles it all in Unreal, carefully adjusting the lighting, music and camera angles. The result is one of the most cinematic games to ever appear on mobile."

Facial animation may just be *Revolution 60*'s biggest technical achievement. The lead character Holiday has a staggering 78 mesh-influencing bones.

"All the girls' hair is fully animated," beams Wu. "A lot of games give women a pinned up hairstyle and call it a day, but we felt strongly that giving the characters good hair was critical for immersion."

When asked what she would say to newcomers to the Unreal Engine, Wu replies: "Unreal is a very friendly engine for an indie dev to work with. I would estimate we've spent less than five per cent of development time troubleshooting, and I quickly learned how to use it."

There's more news to come from Giant Spacekat and the *Revolution 60* universe before the game ships in April 2014. Visit **unrealengine.com/showcase** to read the full story and stay up to date with this up-and-coming team. ■

www.revolution60.com

UPCOMING EPIC ATTENDED EVENTS

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November 5th to 7th
Los Angeles, USA

Montreal International Game Summit 2013
November 11th to 12th
Montreal, Canada

London Games Conference 2013
November 13th
London, UK

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MICROSOFT SPOTLIGHT

Whispering Gibbon discusses the potential of Microsoft Ventures' London Accelerator to give new games studios a welcome boost

Whispering Gibbon
Selected projects: *Tiny Trees*
Who are they? A Newcastle start-up team, which is part of Microsoft Ventures' Accelerator programme
Microsoft's involvement: Providing an incubator for new studios to help make their start-up a true business
www.microsoftventures.com/accelerators

FOR INDEPENDENT STUDIOS devoted to the notion of 'indie spirit', success can prove a tricky business. Partnering with platform holders and publishers, making your studio into a business and generating cash are all things cynics might suggest undermine the defining qualities of what it is to be indie.

Start-up Whispering Gibbon, however, is proof incarnate that a studio can be an independent entity and a true business. For the team of 'three-and-a-half staff' have signed up to a number of Microsoft initiatives conceived to support small teams, all the while ticking plenty of boxes that highlight the outfit as a bona fide indie.

Having turned their back on work for giants of triple-A development, the core team are currently based in Newcastle, and as part of Microsoft Ventures' London Accelerator programme are spending 12 weeks commuting between their home city and London, some 250 miles away, staying on friends' floors and sofas each week. They are making a distinct game in the form of the horticulture-themed *Tiny Trees*, and are collectively a world away from the corporate world of sequel-spawning mega studios.

But, says founder and director Joe Stevens, having signed up to Microsoft Ventures' London Accelerator initiative, they are learning how to become a robust business without sacrificing creative freedom, thanks to a programme conceived by Microsoft to mentor early-stage start-ups and condense the time a given team's game takes to reach the market.

"Microsoft Ventures' London Accelerator sees us working from London for 12 weeks, and for us it's been about building a company," offers Stevens. "There are so many indie devs out there that are talented at what they do, and that can make a good game, but sadly these days that doesn't mean you're going to go on making a living out of it.

"There's so much to learn about business; about the speed you grow, where you focus and so on. So the Accelerator, for us, has let us turn from an indie that loves making games into one that is an indie company; a place that's indie and a viable business. And it's working for us, and it's bringing us together as a team that are also a business."

> ***"We just wanted to get back to being creative, and get excited about stuff that's a bit different."***
>
> Joe Stevens, Whispering Gibbon

FROM ABERTAY ONWARDS

Like many indies suddenly making their presence felt in the UK development space, Whispering Gibbon's story has some Abertay funding in its early chapters. The money from the institution, which is famously supportive of the games industry, afforded Stevens and his team to build a bolstered version of an existing prototype that suitably impressed Microsoft, and soon Stevens and his colleagues were applying for the Accelerator.

"It's focused us so much," says Whispering Gibbon systems programmer Kyle Whitelaw of the journey the team has taken. "It's so easy as an indie to have so many ideas and not focus on what you need to do as a company. The Accelerator's also really helped us with developing an identity, and making decisions as a business."

And for Whispering Gibbon, the support from Microsoft does not stop with the Accelerator. The team have long been signed up to BizSpark, granting them free access to a wealth of development middleware and additional use of Microsoft's Azure cloud back-end. Meanwhile, at the time of writing, Whispering Gibbon is well into the process of securing funding from Microsoft and trade body Creative England's Greenshoots collaborative initiative, which offers up to ten independent developer start-ups funding of as much as £25,000, along with a wealth of technology, services and other assistance.

LIVING THE DREAM

Ultimately, in showing it is possible to harness not just one, but a number of Microsoft programmes targeting start-up studios, and by proving you can remain indie and work with technologies biggest companies, Stevens and his colleagues have been able to move towards something of a dream.

"We just wanted to get back to being creative, and get excited about stuff that's a bit different," reveals the studio director. "To me triple-A has become increasingly stale over time. That's understandable, as over time some big studios have had to take less risks, because it is costing more and more to make games. To me, though, that was the ideal time to jump ship, and take what I'd learned from triple-A back to my childhood passion of making really unusual games, and plenty of stupid stuff too."

Stevens may joke that his ideas are 'stupid', but *Tiny Trees* is already looking promising. And there are no regrets for Whispering Gibbon, who are learning what it is to be a true indie company, without having to commit to giving away a share of their company or working solely on Microsoft platforms. ■

Whispering Gibbon's Kyle Whitelaw (top) and Joe Stevens (bottom) say Microsoft's accelerator programme is showing them how to become a robust business without sacrificing their creative freedom

PITBULL BYTES

An interview with managing director Robert Troughton on the UK studio's origins

Pitbull Studio (main) was set up by managing director Robert Troughton (above) in 2010, a year after Midway's collapse, and now houses 45 staff

How did you get into the games industry?
My interest in video games started back in the '80s with the Commodore 64. I'd always had this interest in how games were put together. I had a lot more free time back then, so I would use a piece of hardware called an 'Expert Cartridge' that let you inspect the machine code. With that, I would change things – how high a character could jump, for example – by finding the right piece of code. I then progressed to coding my own games, all in assembly language, along with 'scene demos'. This was all while I was supposed to be doing my homework, of course.

After university, I got a job working at Reflections, a small Newcastle studio that had just finished up work on their Amiga title, *Brian the Lion*, and had begun work on a racing game prototype: *Destruction Derby*. The title was picked up by Sony to be a launch title on the original PlayStation. The team was small – just four programmers, one artist and a designer.

And next you co-founded Pitbull Syndicate?
I actually had a year out working for Scavenger. They took a few key people from various companies that had been working on PlayStation games and created a new studio in Liverpool just for us. It was a year out because, really, they just let us get on with whatever we wanted to be doing. With no clear leadership or plans, we had a studio of programmers and artists all working on their own engines – we had three separate engines in development – and game prototypes.

When Scavenger US came in and decided that this wasn't really working, I started sending my CV around to see whether I could get a 'serious' job. I went to meet the guys at Revolution Software in York, who offered me a place to work on *Broken Sword*. I'd actually interviewed there the year before and had opted for Scavenger instead – that was a mistake. I promised Charles Cecil that I definitely wouldn't turn his offer down this time round. But then I heard from some of my friends at Reflections: they were looking to leave to set up a new racing game studio, Pitbull Syndicate. So I had to let Charles down again – being a co-founder of a new start-up was something that I just couldn't turn down.

> ***"I had to let Charles Cecil down – being a co-founder of a new start-up was something that I just couldn't turn down."***
>
> Robert Troughton, Pitbull

Do you think you made the right choice? Was it easy back then as a start-up studio?
I definitely don't have any regrets. We had a great project signed up with Accolade: *Test Drive 4*. We had a small team to start with – just the eight founders of the studio – and nine months to complete the game. By the end of development, we'd grown to around 15 people and with this team we delivered the game on time, on budget, and it released to critical acclaim in most of the gaming press. We went on to make three further *Test Drive* games, along with some side projects: a very well received *Demolition Racer*, *Demolition Racer: No Exit* and, umm, *Big Air* – our only foray into snowboarding games.

Pitbull Syndicate was later sold to Midway Games. How did that come about?
We were part way into production of an open world *Test Drive* for Atari. They decided they couldn't really afford to fund the game so they contacted several publishers to see who might be interested. Quite a few were but Midway came in with the best deal. They'd been looking to reboot their *Rush* franchise and really liked what we'd been working on, so that project became *LA Rush*.

After that, Midway expressed an interest in purchasing Pitbull Syndicate. They were making a lot of bold moves at the time with new IP and a large investment in Unreal Engine and Unreal Tournament. They wanted us to work on racing game technology with Unreal Engine to be shared across Midway's studios worldwide, and we'd proven our expertise in this field. We accepted the offer and rebranded as Midway Studios Newcastle. At this time, we were around 40 to 50 people.

We worked on the racing tech for Midway and developed *Wheelman*. At the time it was the first open-world racing game developed with Unreal Engine. When the game published, Midway was in financial trouble and had announced it was going into bankruptcy. Several months after *Wheelman* shipped, the lawyers and liquidation specialists arrived at the studio, advised everyone to go home – and that was that. I won't go into detail here, but it was a sad, sad day for the whole team.

How did you go from there to relaunching as Pitbull Studio?
The team disbanded after the Midway closure. People went to work at other studios in the North East, around the UK, or even overseas. Some left the games industry completely. I went to work at CCP Newcastle in 2009. It was a year later, in 2010, that I eventually decided to leave and form Pitbull Studio.

Our first contract was with an offshoot company of the NHS, developing *Circus Challenge*, a rehabilitative game for disabled children. We also approached Epic Games to see whether they would let us do some work on Unreal Engine. Luckily for us, they were just starting to dabble with outsourcing at the time. We only had five employees at the time – with the rest of the staff busy working on *Circus Challenge*, I took the Unreal Engine work on myself.

How did you go from just five people in 2010 to 45 people today?
As we did more work with Epic, we gradually added more team members. Initially we saw the Unreal Engine work as a sideline, but every time we found a great programmer to add to our team, Epic found more work for us. We found that people were really enjoying the work, because they were working on cutting-edge technology that they wouldn't have had the chance to work on in any other job. Our rate of expansion was accelerating as word spread about what we were doing. ■
jobs@pitbullstudio.co.uk

HEARD ABOUT

John Broomhall talks to composer Olivier Deriviere about scoring new sci-fi IP Remember Me

Remember Me
Developer: Dontnod Entertainment
Publisher: Capcom
Platform: PC, PS3, Xbox 360
www.remembermegame.com

REMEMBER ME

You've said *Remember Me* is a unique production for you. Why is that?
Olivier Deriviere: To work on a sci-fi game that takes place in Paris in 2084 was already a pretty unique experience but capturing the core idea – the digitisation, storage, exchange and hacking of memories – pushed me to a level of creativity that was quite insane. What I arrived at was a live orchestra that is electronically manipulated by digital effects to create a new layer within the musical palette.

How did you come to be involved?
People might think it is because I'm French but it actually happened after an anonymous pitching process. I was so excited by Dontnod's vision that I did something completely crazy, thinking that it deviated much too far from the norm, but I felt I had to take the chance. I can't express how surprised I was to have been the one chosen.

How was your working relationship with the Philharmonia and mixing engineer John Kurlander through the orchestral recording? What were you trying to achieve and how did you go about it?
To support the idea of digitising an organic form, we needed to start with live musicians. And to ensure it would match the pre-programmed electronic effects, we needed excellent musicians who could handle the sharp tempo without sacrificing the musicality. The Philharmonia Orchestra is one of the best in the world and I am really amazed by their performance. At the same time, legendary recording and mixing engineer John Kurlander (who worked on *Lord of the Rings* and *World War Z*) captured the most genuine and beautiful sound the orchestra could produce. The combination of the two gave the game this extra dimension we needed to express the beauty of Neo-Paris and the story.

How much were you involved in the integration of your music to the game?
For more than ten years, I've been working very closely with developers. I work to understand their requirements and how I can help. When Dontnod told me they were working with Wwise, I was very excited because I knew how crazy we could go with the music implementation.

I am always attached to how the music can factor into the player's experience. Of course there is the narration, but a game is based on gameplay mechanics and as a hardcore gamer, I always try to understand how I can support those mechanics. After consulting with creative director Jean-Maxime Morris and audio director Nicolas Teplitzky, we decided to support the fight system with a score that would follow every move of the player, giving them feedback, support and a sense of reward if and when they did well. The level of detail and complexity of the game's fight system made the music quite complex to produce, and I felt the composer would be the best person to adapt the vision as musically as possible.

With over three hours of music cues, how long did this project take and how do you approach a production of this magnitude?
The project took me about eight months, which was great because it gave us time to experiment. My process for every game I work on usually starts with the search for 'colour' (what instrument or instruments we will use). Then I write the main themes.

Next, together with the creative and audio directors, we structure the music on top of the game structure. Following that I work on the implementation and start writing the generic music to finally compose the narrative cues that can be assimilated to a movie score. I think it is very important to end with the scoring because your palette is ready and then you just have to pick what you need and do some variations. That's how you end up with a lot of music that makes sense from beginning to end.

I worked very closely with the team. This is very important to me – it helps me understand the game better and provide a better fit for it. I confer mostly with the audio director and creative director but I like exchanging with the game and level designers, too. It helps me understand their vision and I try to support that with music. Usually, those conversations generate great ideas.

Where does the music for *Remember Me* rank in your extensive career?
For every game I score, I like to create a sound that has a unique identity, so this has, been an opportunity beyond my wildest dreams. I love electronic music and I've always thought it would be amazing to treat an orchestra with all the effects that artists like Aphex Twin and Clark to use. The problem was that I didn't know how to produce it and initially I was really in the dark. But with a lot of hard work and the help of John Kurlander, the Philharmonia, the whole team at Dontnod and so many others, I can listen to the final soundtrack and think quietly: "It is done. What's next?" ■

Composer Olivier Deriviere (above) recorded a live orchestra (main), and fused together organic and electronic sounds to meld his score to the sci-fi setting of Capcom's Remember Me (inset)

John Broomhall is a game audio specialist creating and directing music, sound and dialogue. Find him at: **www.johnbroomhall.co.uk**

MADE WITH MARMALADE

A first look at the newly released Marmalade 7 and its Featured Partners

Marmalade 7
Why Marmalade 7 matters: The newly released version of the SDK is more powerful and faster for developing cross-platform games and is also the most accessible edition yet
www.madewithmarmalade.com

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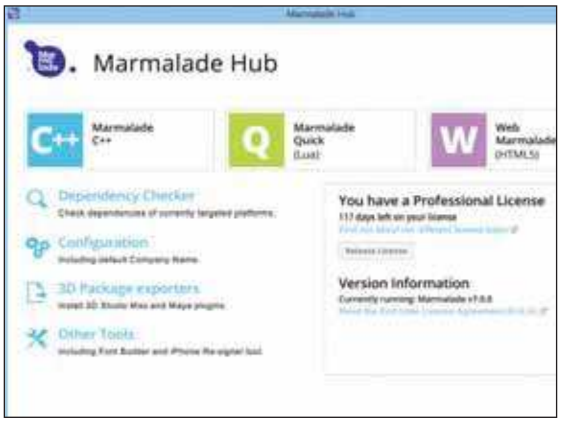

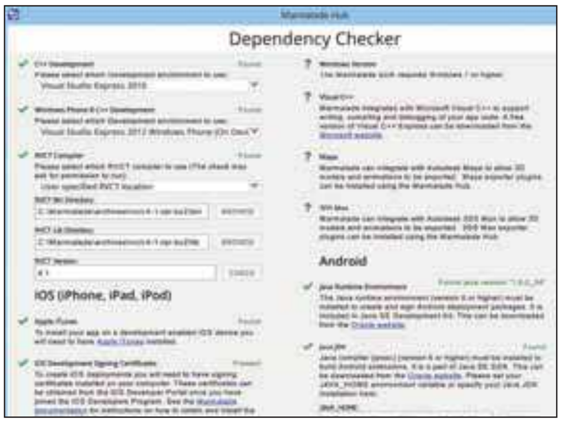

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FEATURED PARTNERS

The tools and services that are Featured Partner Integrations within Marmalade 7 will include:

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www.flurry.com **www.inmobi.com**

Game analytics: Flurry Analytics
www.flurry.com/flurry-analytics.html

Game audio: Audiokinetic Wwise
www.audiokinetic.com

In-app purchases: Fortumo
www.fortumo.com

Engagement: InMobi Lifetime Value Platform
www.inmobi.com/products/ltvp

Multiplayer gaming: Photon Engine
www.exitgames.com

Promotion: Chartboost
www.chartboost.com

Rewards: Paedae
www.paedae.com

Top-to-bottom: Dan Laughlin, Krishnendu Majumdar, Martin Koppel and Tony Waters

THE MARMALADE SDK has long courted a reputation for letting developers build cross-platform C++ games rapidly and with ease. And now Marmalade 7 is here, meaning the tech has become not just increasingly powerful and flexible, but even faster and more accessible.

Of course, the new update to the SDK introduces numerous optimisations and bolstered features, but it is the new ease of access that is perhaps most significant.

"We've really focused on improving the user experience," explains Marmalade's head of SDK Tony Waters. "One of the real advantages of Marmalade has always been that it is so open and flexible, and there's literally hundreds of different ways you can use the product. For our most experienced users that's great, but our new users can almost be bewildered by the sheer number of options and plug-ins and extensions available."

THE FULL SPREAD

And so it is that, from a user experience perspective, Marmalade has been reworked to be more welcoming to developers that are new to cross-platform. There is a range of new tutorials and templates available, and significantly, a new initiative named Featured Partner Integrations.

This scheme will offer those who download Marmalade 7 access to additional tools bundled with the SDK and documentation. Each is a longstanding Marmalade partner, providing everything from analytics to promotional tools. The idea is that Marmalade does not just deliver a complete SDK, but also a wider ecosystem for the creation, monetisation, promotion and player retention of a game.

"It's all supporting the main focus of the Marmalade 7 product, which is that Marmalade is the fastest way to build cross-platform C++ games," confirms Waters. "By bringing all of these elements together, you have got all of those things at your fingertips, in one place."

The update is something the Featured Partners themselves also seem hugely enthusiastic about; evident in comments from Martin Koppel, co-founder and COO at global payment platform Fortumo.

> ***"Marmalade has always been open and flexible, so there are literally hundreds of different ways you can use the product."***
>
> Tony Waters, Marmalade

"The entire logic behind Fortumo is making developers' lives easier," states Koppel. "Mobile payments used to be difficult to implement as each operator required a separate integration and fees were pretty high. With mobile payments bundled into Marmalade, a monetisation solution is built into the app seamlessly – providing a faster time to market, extensive coverage, high conversion and eventually bigger profit."

Flurry specialises in analytics and advertising technology, and its senior director of games business development Dan Laughlin adds: "Now, Marmalade users will have the industry-leading Flurry Analytics service and Flurry AppSpot monetisation tools working right out of the box. With M7, developers can start analysing user behaviour, creating ad spaces, and flip the switch to generate revenue from live ads without new SDK work."

Elsewhere, InMobi is confident partnering with Marmalade can bring its ad technology to numerous new users.

"With InMobi stepping up as a Marmalade 7 Featured Partners, we are thrilled to extend our monetisation solution to developers using the Marmalade platform," says Krishnendu Majumdar, head of products and developer solutions at InMobi. "Through the Marmalade plug-in built for InMobi Ad SDK 400, developers can access several market-leading tools and features on the SDK to maximise revenues."

SPOILT FOR CHOICE

Marmalade's numerous other partners remain in reach of the SDK's users, and many other options still exist for using tools with the tech.

"If you're not too sure, you can pick a tool that is bundled with the SDK, or you could look at our wider partners on our website, or go wild and have a look at what other developers have created, or even create your own," offers Waters. "There's a wide range of options."

The changes to Marmalade, which also include the likes of optimisations to screen rotation and significant improvements to Windows Phone 8 support, come from much discussion with and feedback from developers.

If you are new to Marmalade, there's never been a better time to get on board. And for experienced users, the SDK is more flexible, more powerful and faster than ever before. ■

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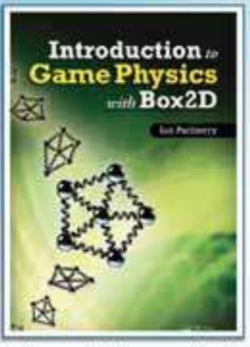

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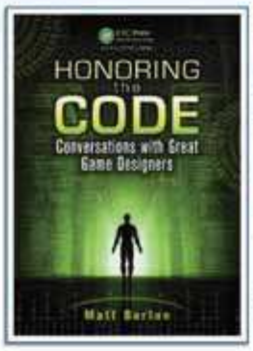

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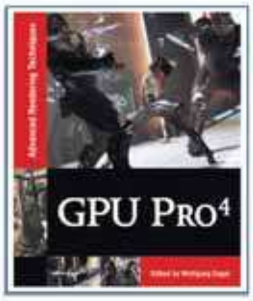

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RECRUITER HOT SEAT

CCP's HR manager **Scarlet Dangerfield** explains why it's good to make games as a service, and why you should get involved

What differentiates CCP Games from other developers?
Each of our five studio locations foster a unique environment, while still fitting cohesively within the whole of CCP and towards a shared vision of creating the highest calibre virtual worlds fuelled by 'meaningful human interaction'.

Collectively they work with well-developed, cutting-edge technology, and yet enjoy relative autonomy within the global effort. We have employees from over 30 countries, speaking over 20 different languages, representing a truly international community, and we are growing.

CCP Shanghai, China: The home of the free-to-play PS3 first-person shooter *Dust 514*, housing 130 employees in a new office and looking for creative talent.

CCP Reykjavik, Iceland: Our corporate headquarters and the birthplace of *Eve Online*, situated next to the harbour with views of dramatic Icelandic mountains, water and the city. And it is within walking distance of a vibrant, yet cosy downtown.

CCP Newcastle, UK: A key technology centre for CCP and now home to development of the newly announced virtual-reality based space dogfighting game *Eve: Valkyrie*.

CCP Atlanta, Georgia, USA: Located inside the Atlanta perimeter in the progressive city of Decatur. America's top 'Foodie City' boasts a great environment and a low cost of living.

CCP San Francisco, California, USA: CCP's main marketing hub is located here in beautiful San Fran, rubbing elbows with the world giants of tech.

How many staff are you currently looking to take on?
CCP is currently hiring globally, in a variety of departments, from programming, to game design, marketing, production, human resources and art. You can check out the full list of our current needs at **www.ccpgames.com/jobs**.

What perks or privileges are available to staff at your studio?
For the last year, CCP has had an internal goal of focusing on developing our employees. We are in the process of deploying a training system to help our employees stay on top of the latest trends and technologies in their respective fields, along with growing in other fields of their interest.

This is in addition to some training initiatives that include teams being able to use 20 per cent of their time to explore special projects, and art teams bringing in models to encourage our staff to do on-site live drawings.

On top of that, CCP offers fantastic benefits packages that differ in each location. Some of the benefits include 16 holidays per year, unlimited vacation and sick leave, rich medical benefits, 401k (pension), an on-site cantina that provides free breakfast and lunch daily, global company-wide trips (we all recently flew out to Turkey in October), on-site gym, monthly barbeques, a childcare support benefit, flexible working hours, an on-site doctor and optional masseuse among all of the usual perks of working at a games company – like being able to play games during the day.

BIO
Name: Scarlet Dangerfield
Title: HR Manager
Developer: CCP Games
www.ccpgames.com/jobs

> ***"The best interviewees are the ones that will go above and beyond the norm to show their interest in the position."***
>
> Scarlet Dangerfield,
> CCP Games

GET THAT JOB

Development specialists offer advice on how you can make that career leap

THIS MONTH: QA MANAGER

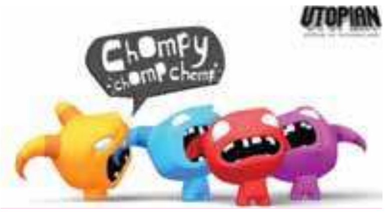
"Contrary to popular belief, people who work in QA don't just play games all day. Well, we do, but not in the same way as when we're playing for fun.

"If you fancy getting into the QA side of games development, you'll need a genuine passion for games, strong communication skills and an eye for detail. There's no set route into management, but you'll be involved in every aspect of testing, from bug reporting to budgeting and HR, so you need to be organised and have good people skills.

"Our new recruits usually apply for testing roles through our forums and work their way up from there, but every studio and publisher will have its own approach. I'd suggest that you make initial contact through the studio's website."

Stuart Warren,
QA Manager, Sports Interactive

SIX-SECOND STUDIO SPOTLIGHT



- *Sarah and James Woodrow*, of Utopian World of Sandwiches, met 13 years ago and quickly realised they shared a love for games and the dream of making them
- James handles the coding, design, visuals and music, while Sarah oversees production and art
- UWoS wants to make games with a purpose that have a meaningful impact on players
- Its first title, *Chompy Chomp Chomp*, is out on PC and Xbox, and is now coming to Wii U
- "The purpose of [our games] is to bring people together," says James Woodrow
- Next year it is looking to build the *Chompy* brand starting with a board game.

utopianworldofsandwiches.com

What should aspiring developers do with their CV to get to an interview?
It's pretty simple; just make sure your resumé highlights how you are a good fit for the opening you're applying for. Make sure to include any relevant experience, education, and awards.

Also make sure you include your most up-to-date code sample, writing sample or demo reel. Demos and samples get the most attention. Include not only work from previous companies, but also samples of work you do in your free time. It shows off your interests and the work that you would do when you are not being paid to. If it's in the theme of something we are working on that's even better.

Even if you're not looking for a new job, make sure your LinkedIn profile – and other social media – is up to date. Our recruiters are always checking out LinkedIn, Twitter, YouTube and Facebook for possible candidates.

Who is the best interviewee you have ever had?
The best interviewees are the ones that will go above and beyond the norm to show their interest in the position. Be it a cantina staff member that comes to an interview with a proposed menu along with baked snacks to surprise the staff, or a character artist that created a new demo for the interview that incorporates their vampire characters based off a *Vampire: The Masquerade* role-playing game.

These are the enthusiastic candidates that we get excited about and that get job offers. CCP is a home to people who are passionate about their work and the industry as a whole. Show us that passion alongside your talent.

And who was the worst?
At CCP we have a pretty intensive screening process, so most candidates we end up bringing on site are usually hired, resulting in few interview horror stories. I can say candidates that do not get job offers though are candidates that show up late, unprepared or not at all.

What advice would you give jobseekers for a successful interview?
Research, research, research. During the first step of HR screening, we start weeding candidates out that 1) are not a good fit with our culture; 2) do not know our products; and 3) do not know CCP. This will continue throughout the interview process with your potential teammates and then hiring manager. The best way to learn about CCP is by visiting our website.

If your studio has recruited talent internationally, what was the process like for your studio and for the applicant?
The recruitment process is essentially the same for international candidates as local candidates. They still go through the same rounds of tests and interviews. We do make sure to provide the international and non-local candidates with plenty of information on the project and location from their first screening, just to ensure that they are aware of what they are getting into.

NEW STUDIO ALERT!

Sunny San Diego is the home of **Molten**, a studio with ambitions to reach a global audience with its original games.

"Our CEO, Jungwon Hahn, and I worked together for many years at Blizzard," chief product officer Paul Della Bitta tells *Develop*. "He is a very experienced executive and recognised that with all the disruption coming from the rise of mobile, social and free-to-play business models, there would be an opportunity globally for a company with the right approach to making games combined with a solid business model."

Molten currently has over 40 employees, including veteran talent from studios like Sony Online Entertainment, Blizzard, Trion Worlds and other online games developers.

High quality, free-to-play online games are its focus, and Molten plans to ship its first title on PC, with next generation consoles being considered too.

"We feel we've assembled one of the best development teams in the online space today," says Della Bitta. "Our plan is to make great games now and long into the future. We want generations of gamers to play and talk about our games with reverence, or to say 'Damn, Molten makes some badass games' as they are playing our latest creation."
www.moltengames.com

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MOVERS AND SHAKERS

This month: CCP Games, King, GamesAnalytics and Flaunt Productions

CCP GAMES ■ *Dust 514* maker CCP Games has hired long-time Battlefield producer **JEAN-CHARLES GAUDECHON** as executive producer for its free-to-play PS3 shooter.

Gaudechon's role will be to drive future development of the persistent-world FPS at CCP's Shanghai studio. Gaudechon brings ample experience with online and free-to-play games from his time at EA in Stockholm, where he oversaw the development and service of *Battlefield: Play4Free* and *Battlefield Heroes*, expanding the franchise into the free-to-play realm. Prior to that, Gaudechon led the development and launch of EA's online racing MMO *Need for Speed World*.

"The scope and vision of *Dust 514*, and its integration into the massive *Eve Online* universe is unparalleled, creating the largest, single-shard online multiplayer game to date," said Gaudechon. "I look forward to my journey with CCP as we push the boundaries even farther."

Sean Decker, SVP of product development at CCP, added: "In addition to his extensive experience in the free-to-play space, Jean-Charles brings a tremendous sense of product vision and creativity to *Dust 514*. His track record will serve the growth of *Dust 514* very well."

KING ■ *Candy Crush* creator King has appointed two new senior staff in another step to expand its business.

HOPE COCHRAN (*above left*) is the casual gaming firm's new chief financial officer, while **CIARA SMYTH** (*above right*) becomes its new chief people officer.

Cochran previously worked at telecoms operator Clearwire in a similar role, and has previously worked at companies such as Deloitte and Touche.

Cochran said: "I am excited to be able to join King and the team at this point in its journey. King has had a long track record of success and I look forward to embarking on this next phase."

Smyth will be responsible for leading all human resource activities, including performance management, recruitment, retention, training and development.

She will join King at the end of October, after serving as executive VP of human resources for Zipcar, one of the pioneers in car sharing.

"I am thrilled to be joining King, a company with a uniquely collaborative culture and strong commitment to the development of its employees at every level," said Smyth. "I look forward to working closely with the team to continue to make King a great place to work and preserve its strong culture."

King CEO Riccardo Zacconi said: "Ciara is a great addition to the King team. Our talent is a huge strength – we're committed to attracting and retaining the best people in the industry and helping them to build successful careers."

……

GAMESANALYTICS ■ Scottish analytics firm GamesAnalytics has appointed **KEITH ADAIR** as its head of business development for EMEA.

Adair will be responsible for developing the firm's growing portfolio of publisher and developer clients across these regions, as well as its push across the games and gambling sectors.

"It's an exciting time to be joining GamesAnalytics as the games industry re-orientates itself around new platforms and business models and significantly, where the power of analytics to leverage big data and help understand player behaviours is vital for games publishers and developers to succeed," said Adair.

He joins GamesAnalytics from mobile publishing and distribution firm Iplay.com, where he spent ten years working with publishers, platform owners and network operators brokering major distribution deals for games IPs, including EA Sports' *FIFA* and *Tiger Woods*, as well as *The Fast and Furious*, *Moto GP* and *Metal Slug*.

……

FLAUNT ■ Glasgow animation house Flaunt Productions, which has produced work for *Ages of Empires* and *LEGO Harry Potter*, has appointed **ANDREW PEARCE** as executive producer as it looks to reach new clients.

At Flaunt, Pearce will focus on building relationships with developers and publishers of casual and handheld titles.

He told *Develop*: "My background is in branding and advertising, so I'm very aware of the importance of a powerful identity in a time of flux. Our job is to create iconic animated content that complements the awesome work that our clients produce."

Pearce produced at sister company Axis Animation for three years before moving to Flaunt.

Richard Scott co-founder and managing director at Axis Animation added: "Andrew has been doing great work as part of Axis and his design, branding and games knowledge will make him invaluable to Flaunt's video game clients."

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Services & Tech Recruiter Hot Seat

VR is hot right now, and Oculus is the reason. Its VP of product **Nate Mitchell** explains what a career at the firm offers

What makes Oculus VR different from other games tech companies?
Oculus is building the world's best consumer virtual reality platform. It's a highly cross-discipline team developing software, hardware and products that we believe will revolutionise the way people live, learn, work and play.

This is an opportunity to join a truly unique start-up, working with incredibly smart engineers on innovative, consumer-facing technologies that are set to change the world.

What benefits do you offer your employees at Oculus?
Aside from working with some of the best and brightest minds to build the Metaverse. We strive to empower, appreciate and have fun. We offer competitive salaries and stock options, great health care, dental and vision coverage for employees and families, access to cutting-edge hardware, catered lunches and dinners, an on-site gym membership and a free Oculus Rift.

What disciplines are you in need of?
We're looking for high calibre talent, especially top notch software engineers and technical leads for a wide variety of projects and challenges, including core tech, computer vision, robotics, graphics, 3D engine development, tools and even content development.

We're also in need of more great web services and infrastructure engineers to help build out the platform, which will bring Oculus users together from around the world.

And we're always searching for the very best hardware, industrial, mechanical and electrical engineers to help push the boundaries of what's possible by building new creative technologies designed for virtual reality.

What opportunities are there for career progression?
We believe great employees do their best when they're given significant ownership, leadership and responsibility. Challenged, but also able to share in the success, especially when working with a talented team on a product that changes the world. This is one of those rare opportunities.

Why should perspective employees choose a career in hardware?
There's something very special about creating a consumer product that people around the world physically interact with, especially when it's powered by innovative software and a great user experience. We're trying to build one of the best places in the world to work. Come help us.
www.oculusvr.com

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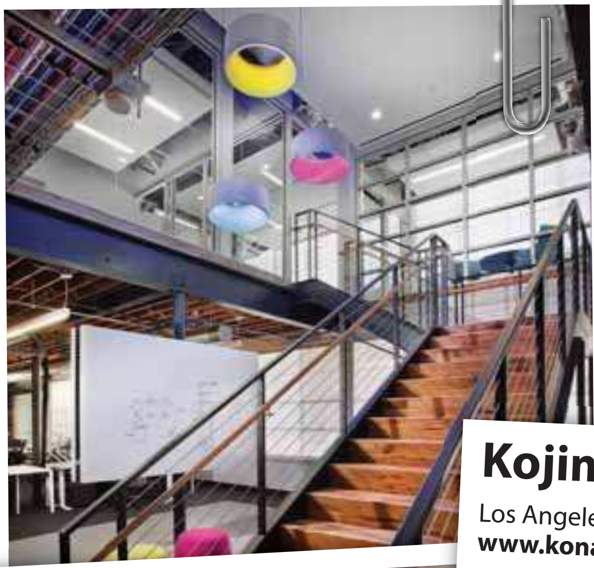
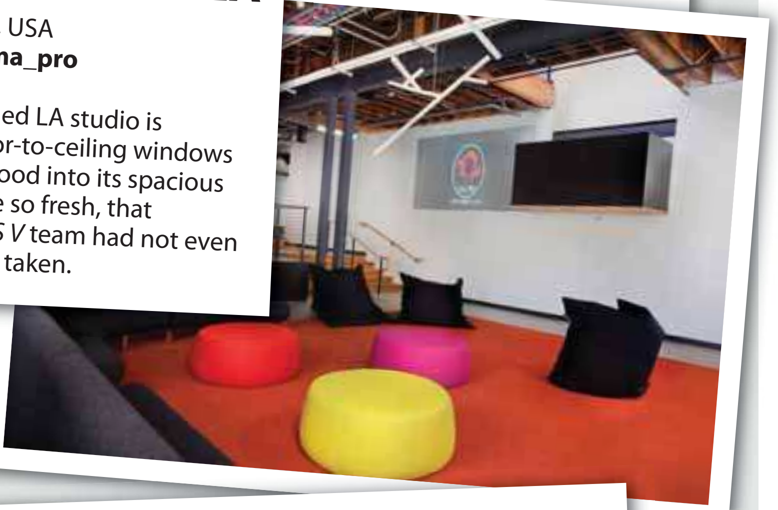


Kojima Productions LA

Los Angeles, California, USA
www.konami.jp/kojima_pro

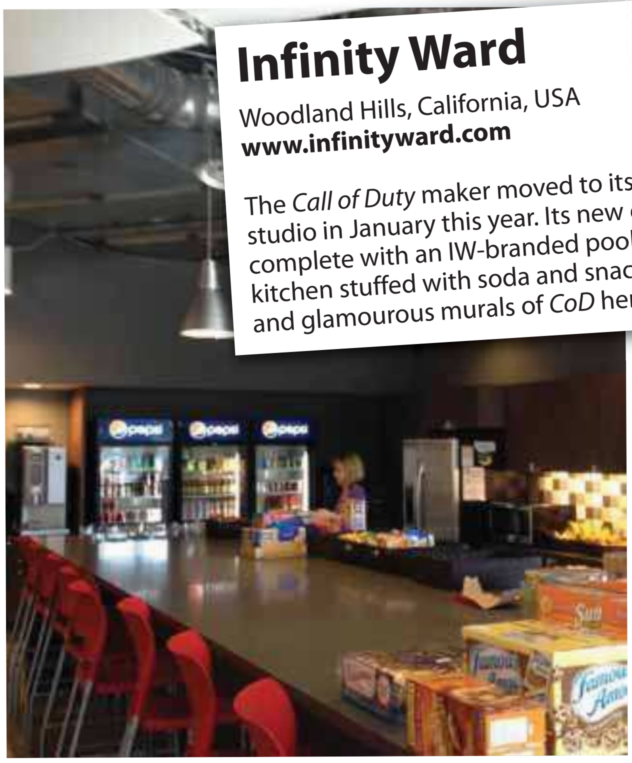
Konami's recently opened LA studio is characterised by its floor-to-ceiling windows that allow sunlight to flood into its spacious interior. These snaps are so fresh, that Kojima's secondary *MGS V* team had not even arrived when they were taken.



Infinity Ward

Woodland Hills, California, USA
www.infinityward.com

The *Call of Duty* maker moved to its current studio in January this year. Its new digs come complete with an IW-branded pool table, a kitchen stuffed with soda and snack food, and glamourous murals of *CoD* heroes.



SERVICES SPOTLIGHT

This month: **Iconic Future**

ICONIC FUTURE'S goal is to bring together the worlds of licensing rights and video games.

Founded in January 2011 by Thomas Martens, Malte Barth, Ze'ev Rozov and Christian Weddigen, the company has worked with rights holders including Sony, CBS, Hasbro and the BBC.

It enables studios to integrate branded virtual items and licence brands into online, mobile and social games that it believes will increase monetisation, brand engagement and create more value for those properties.

Iconic Future provides an online marketplace for rights research, discovery and transaction services for both rights holders and game developers alike.

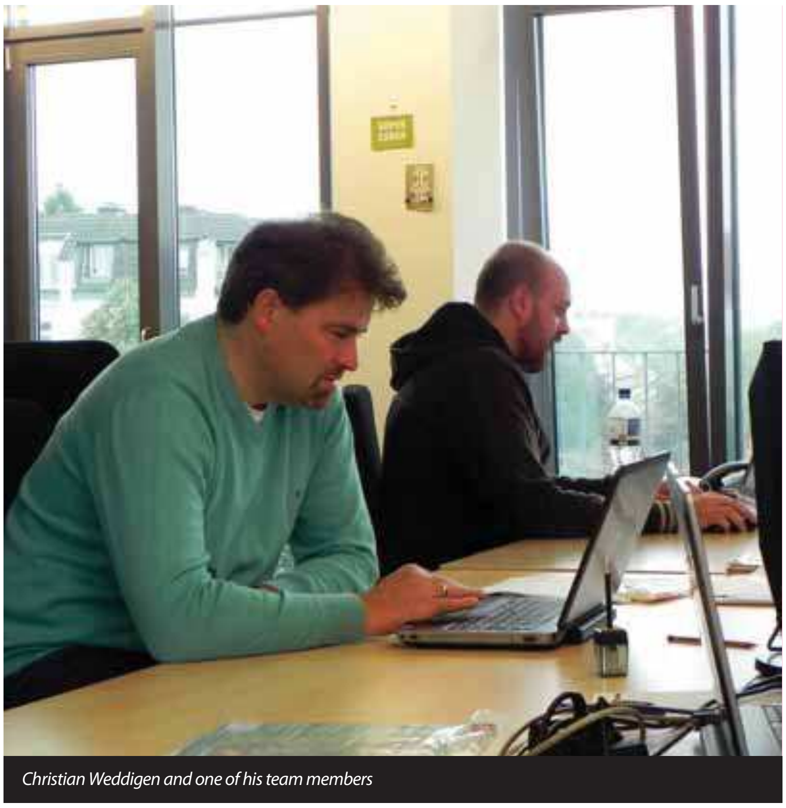
"What makes us unique is our portfolio of licensable rights, which ranges from top sports organisations like FC Barcelona, Real Madrid or Arsenal FC to characters like Shaun the Sheep and Garfield and top movie properties like *Star Trek*," says CEO Weddigen (*far right*).

Iconic Future aims to be a 'one-stop shop' for developers' games licensing needs. The firm manages all aspects of a project under a single framework, which it says avoids time-consuming and expensive legal processes. It dedicates project management resources throughout the entire process to handle launch planning, asset management, product approvals, PR and marketing support, reporting and analytics.

"Most importantly, though, we care about the games we work with and make sure that the branded integration makes sense. Besides adding value, it is crucial to add relevant content that the players will enjoy," adds Weddigen.

He explains that the first step in collaborating with games producers is identifying which intellectual properties or licences would resonate most with the client's target group.

"This has enabled us to provide several highly engaging campaigns, including My Little Pony in *Farmerama* (developed by Bigpoint), Premier League football clubs and Wembley Stadium in *Goalunited 2013* (Northworks), *Star Trek* in *Galaxy Life* (Digital Chocolate) and Ronnie O'Sullivan signed cues in *Pool Live Tour* (Geewa)," says Weddigen. "During Euro



Christian Weddigen and one of his team members

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STAR TREK
THE NEXT GENERATION

Star Trek is one of the properties that Iconic has helped secure for a game

2012, we sold over 40,000 official England team football shirts in *Talking Tom 2* (Outfit 7) at the weekend of the England versus France match alone."

> ***"We care about the games we work with and make sure that the branded integration makes sense."***
>
> Christian Weddigen, Iconic Future

Next, Iconic Future plans to enhance its technical platform with further automation, broaden its consulting services for game publishers and extend its activities in Asia. In particular, it will be focusing on game integration opportunities for the 2014 FIFA World Cup in Brazil.

Finally, Weddigen says developers should come to Iconic Future for their rights needs because: "When it comes to popular IPs for games, we either already have access to them, know how to get to them or know that they are not available. Moreover, our digital marketplace provides for unique data analytics and insights from millions of item sales. Last but not least, we have a well-established working relationship with our partners who trust us with their IP for use in multiple games."

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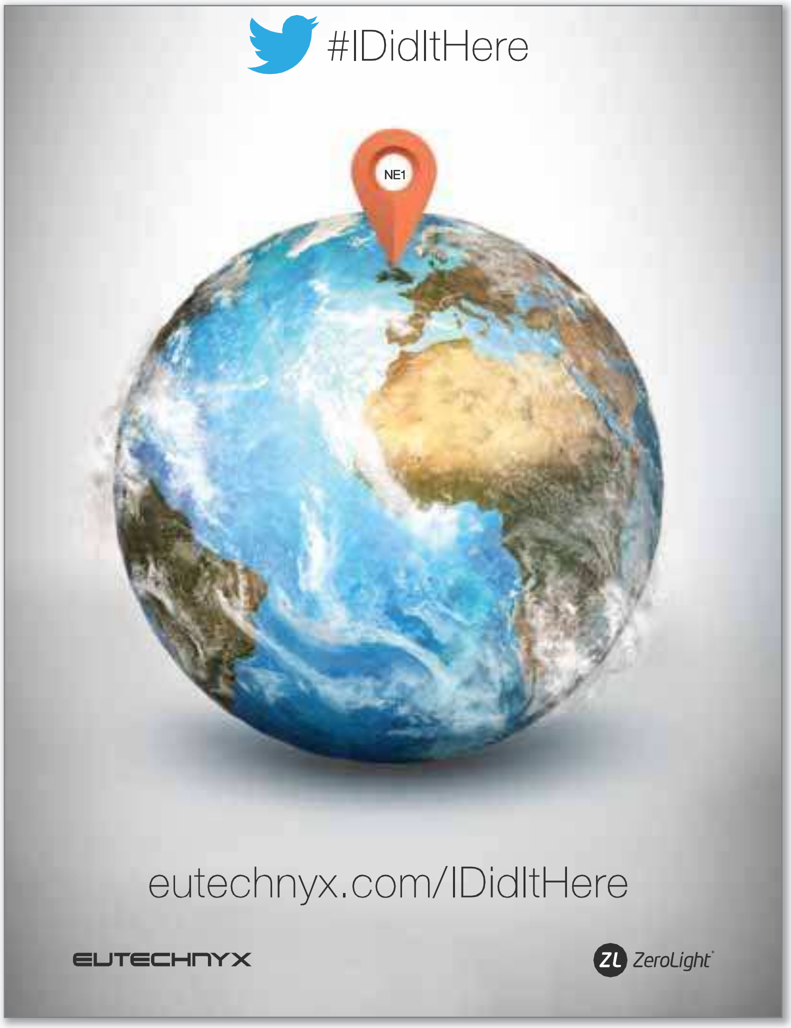
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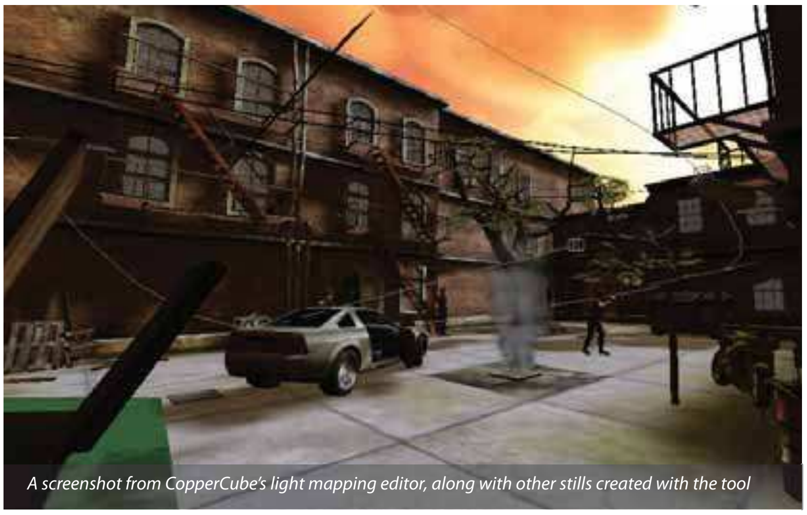
TOOLS SPOTLIGHT

This month: **CopperCube 4.0**



A screenshot from CopperCube's light mapping editor, along with other stills created with the tool

AMBIERA, A SMALL Viennan company founded six years ago by CEO Nikolaus Gebhardt (*far right*), was set up to help bring essential assets in reach of development studios. It provides software libraries, tools and knowledge for developers, and has had a hand in hundreds of games since its foundation.

Flagship product CopperCube is a 3D game development editor. It was originally designed for 3D artists so they could quickly snap together interactive 3D apps and games without programming. It still works like this, but starting with version 4.0, the editor includes a cross-platform scripting environment, making it is possible to create more complex, sophisticated games as well. Gebhardt says this addition is attracting indie developers and even some of bigger fish, who are using it to create prototypes and demos.

Projects that have used the tool include: the post-apocalyptic simulator *EndTime at Home*, *Drones Attack*, *Horse Jumping 4*, *The Dead Tower*, *Nightingales Playground*, *Salvador City*, *Battle of the Juggernauts* and *Killer Raceway*.

"Besides the many target platforms which are supported by CopperCube, it can create 3D WebGL websites, Flash Stage 3D, Windows and Mac OS X programs and Androids apps," says Gebhardt. "It is very easy to use. 3D artists can simply import their 3D assets, models and levels, quickly choose camera controllers and behaviours, hit publish, and that's it. It is very easy to learn and we get quite a few emails from our users, who are very happy with CopperCube."

> ***"It is very easy to use. Artists import their 3D assets, models and levels, hit publish, and that's it."***
>
> Nikolaus Gebhardt, Ambiera

CopperCube is free to try for 14 days. For those that like it, the light edition is available for £130 (€149), or the professional edition for £320 (€380). Both editions enable developers to create apps for all supported platforms.

Ambiera says it is always working on improving the editor and adapting it to the needs of its users, which is why it offers continuously free updates. For instance, the latest update added

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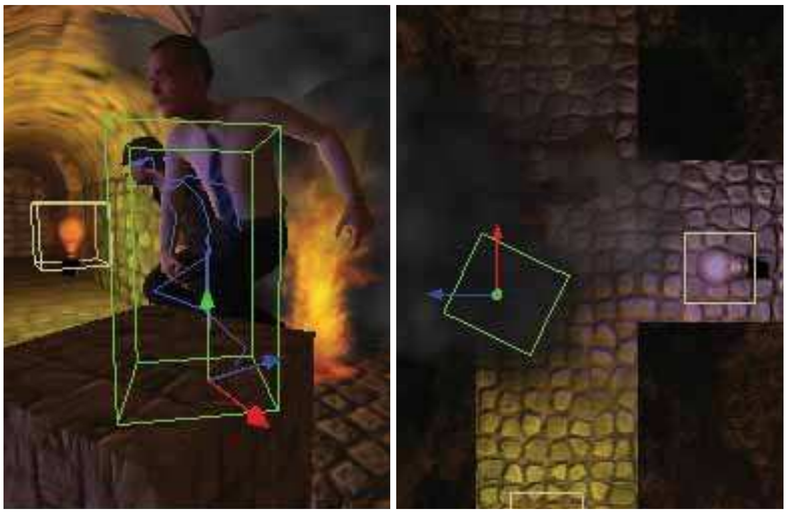

support for normal mapping, multi-touch support, the option to use plug-in actions, behaviours and optimised animated 3D character rendering functions.

The tools firm plans to stay up to date with next generation tech. With Flash gradually fading in popularity to be replaced by HTML5, Ambiera says its already prepared to take advantage of this new phase of web development.

Gebhardt says: "We will probably add more target platforms to CopperCube. Right now, the most requested non-supported platform is iOS, although it looks like even Apple's devices will soon support WebGL, which CopperCube can already target. We are also planning to add more materials and parameters to influence them. A way to create custom materials using your own shaders is also on the way."

AMBIERA
COPPERCUBE™ 4

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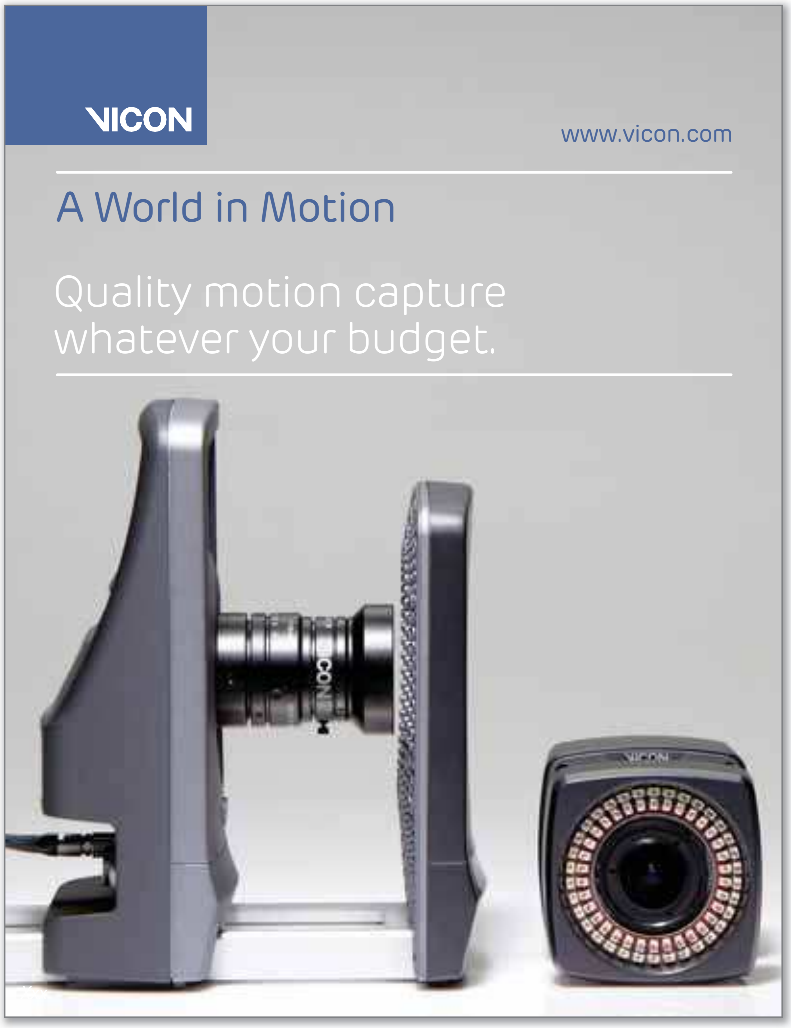

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Paul Ross, CTO, Criterion Games

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HULL IS AMONG the UK's oldest institutions offering games development courses. But it prides itself on being a forward-thinking body that strives to ensure its students gain employment in this rapidly changing industry.

The university has been training students into fully-fledged games programmers for 18 years, and has acquired a reputation within the industry for producing highly skilled games graduates.

"The opportunity to work on real, commercial projects as part of their degrees also ensures our graduates learn the vital software engineering skills, such as agile development and dealing with clients, that are so highly valued by employers," head of computer science Warren Viant (*inset*) tells *Develop*.

> ***"All of this focus on practical development skills means that our students can actually develop good software, as shown by their high level of success in game jams."***
>
> Warren Viant,
> University of Hull

"All of this focus on practical development skills means that our students can actually develop good software, as shown by their high level of success in game jams and software development competitions, such as Microsoft's Imagine Cup, in which we are among the most successful universities in the UK."

Hull offers three games development courses, all of which aim to teach students core skills such as C++, DirectX, OpenGL, distributed and concurrent programming, system architectures, physically-based modelling, artificial intelligence and team work.

BSc Computer Science with Games Development gives students the knowledge and understanding to enter the games industry as a programmer or pursue other opportunities in the graphics, simulation and visualisation sectors.

MEng Computer Science with Games Development follows the same programme structure for the first three years of study as the corresponding BSc degree, the difference being that students complete an additional Masters year to study more advanced topics.

Furthermore, this students gain extra industry experience working with clients on real software development projects. The above programmes are accredited by the British Computer Society.

Meanwhile, Hull's one-year postgraduate MSc in Games Programming provides an intensive education in games development and technology, with a special emphasis on programming. It aims to develop the skills and knowledge necessary for students to pursue successful careers in major studios as a games programmer, and was notably the first Masters games course to gain accreditation from Creative Skillset in December 2008.

Viant says Hull's programmes focus almost exclusively on software development tools and low-level APIs. It aims to impart an understanding of the fundamentals to allow students to go behind the scenes in games engines. Tools used by the courses include Visual Studio, Parasoft C++ Test, PlayStation Mobile, as well as asset libraries and Unity for student projects.

"One of our foremost advantages is SEED, a commercial software development unit within the Department of Computer Science," explains Viant. "SEED plays a crucial role in addressing the skills gap between graduation and employment by providing experience of working on real commercial software for clients as part of a development team. SEED is therefore our primary tool in teaching invaluable employability skills to both undergraduates and postgraduates.

"MEng and MSc students both get the opportunity to undertake industrial projects managed by SEED for a wide range of clients. This guaranteed, high quality industrial experience is unique in the UK, and as a result of the advantages this provides, 100 per cent of the jobs for last year's MEng students were in the games or software industry."

Hull has links with Sony, Microsoft and Eutechnyx, and regular visits are arranged for students to games studios and vice versa. Alumni have gone on to work in many of the UK's major games studios such as Rare, Ninja Theory and Creative Assembly.

Viant says Hull's games programming graduates are second to none, which is why it is at the top of the recruitment list for many UK studios. And he's confident that it will continue to keep up with the industry's needs: "Our partnerships with the major studios and regular attendance at international games developer events, such as GDC, enable us to identify trends in the video games industry. These feed directly into course design and ensure that our students are fully prepared for the industry into which they are graduating. For example, we are already graduating students with the skills needed to develop on next-gen consoles and mobile platforms."

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THE FAQ PAGE: SHAHID AHMAD

Develop grills respected figures from the global games industry

Who are you and what do you do?
I'm Shahid Kamal Ahmad, but people know me as @shahidkamal. I work in business development at Sony Computer Entertainment Europe, running a team called Strategic Content for (#baus) Antony Clark.

What are you working on right now?
We have a ton of new games for the Vita coming out over the quarter, and some new ones on PS4 to move forward, so that's on my mind. Also getting more and more excited about *Football Manager* for the Vita every time I see it.

What was the first video game or product that you ever worked on in the industry?
The first "product" was *Alien Attack*. It was a crappy Atari 400 BASIC programme, but it had user-defined fonts. I "self-published" that in the back of *Popular Computing Weekly* for a week. I sold zero copies at £5 on home recorded cassette. I've used that self-publishing joke twice in public now, so it's only fair that I out it properly in print so I can be done with it.

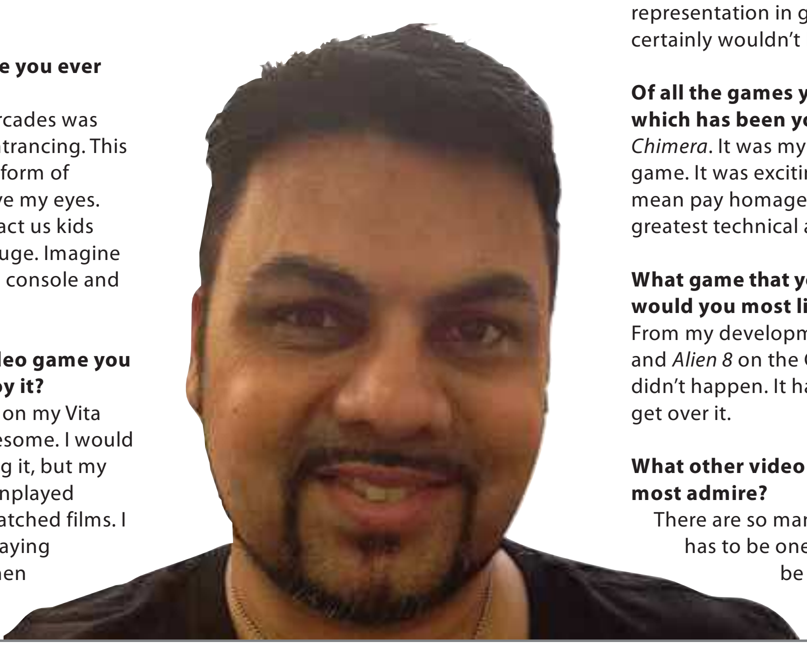
What was the first video game you ever played, and did you enjoy it?
The first game I played in the arcades was *Space Invaders*. It was utterly entrancing. This was the birth of a magical new form of entertainment. I couldn't believe my eyes. There was nothing else to distract us kids back then, so the impact was huge. Imagine the thrill of seeing a brand new console and magnify that a thousand times.

What was the most recent video game you ever played, and did you enjoy it?
The most recent game I played on my Vita was *Spelunky*. It was totally awesome. I would love to spend more time playing it, but my life is filled with the shame of unplayed games, unread books and unwatched films. I want to finally get around to playing *Killzone Mercenary* on it next, then *TxK* and *OlliOlli*.

What is your favourite game ever, and for what reason?
You never forget your first love. Mine was *Star Raiders* on my Atari 400. I still think it remains unparalleled in so many ways, but mostly because Doug Nebauer managed to get so much into an 8K cartridge.

How many hours a week do you spend playing video games?
Nowhere near enough. However, I get to spend more of the week than most ensuring independent developers get onto PlayStation and realise their ambitions. If that's an excuse, I'll take it.

What area of the industry do you think needs more 'investment'?
The industry needs more designers, true designers whose calling is to make video games and nothing else. We need UI experts, and UX engineers. Tools are getting better. Game making is within the reach of more and more people. That's great. I think another area that could use more investment is actually outside the industry, and that's education. I'm delighted with our PlayStation First initiative. We in Britain generally need to do better by our kids in so many ways.



What do you enjoy about the video games industry today?
There's a feeling that anything could emerge from anywhere: the creative energy, the vibe in the indie space, the power of PlayStation 4, my relationships with partners and potential partners-to-be, working with a great team at PlayStation, crowdfunding, physical things being made in less time than ever before.

What disappoints you about the video games industry today?
Although as an industry we've got a lot better, I'd like to see more women represented, particularly in development, and I'd like to see greater diversity, though that too has improved massively over the years. It doesn't have to be women and minorities having more positive representation in games either, though that certainly wouldn't hurt.

Of all the games you have worked on, which has been your favourite to work on?
Chimera. It was my own. I was back in the game. It was exciting. I was trying to rip-off – I mean pay homage to – *Knight Lore*, the greatest technical achievement I'd ever seen.

What game that you were not involved with would you most liked to have worked on?
From my development history, *Knight Lore* and *Alien 8* on the C64. I came this close. It didn't happen. It has taken me 27 years to get over it.

What other video games developer do you most admire?
There are so many greats. Right now, if it has to be one unqualified pick, it has to be Naughty Dog.

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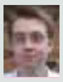
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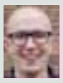
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